UBLISHED IN LONDON AND FRANKFURT.

Monday April 5 1982



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NEWS SUMMARY

BUSINESS

BP Oil

reports

losses

• GHT EDGED business on the London Stock Exchange jumped 43 per cent to a record £17.895n last month. Page 23

• FRENCH interest rates

showed an easier trend as the franc continued to improve within the European Monetary System. The immediate pres-

sure on the EMS seems to have

abated, although currencies such as the French and Belgian

francs, and the Italian hira are

only kept within official limits

by very high Eurocurrency interest rates. The Belgian franc remained the weakest

member; but well above its alarm bell divergence limit.

Firmest currency in the system was still the D-Mark, followed by the Dutch guilder.

· EMS April 2,1982

GENERAL

Bonn invites Reagan £126m to speak

tag, the lower house of West Germany's parliament, when he visits Bonn in June. He would be the first U.S. President to

The news followed a report in the Welt am Sonning news-paper that Reagan had been invited and was eager to accept.

Fraser pressure

Australian Premier Malcolm Fraser called a Liberal meeting for Thursday to discuss party leadership following heavy defeat in Victoria's state elections. Page 3

Diplomat killed

French police said they had no clues to the identity of the woman who shot dead an Israeli diplomat in Paris on Saturday. Two Lebanese groups claim responsibility.

Gadaffi visit

Libyan leader Muammer Gadaffi may visit Greece this month, according to the Athens daily Kathimerini.

Training talks

Employers and union leaders will try to reach agreement this week on a plan to provide all 16-year-olds with a year's pro-gramme of training, work ex-perience and further education. Back Page ..

Police probe

Scotland Yard said the Observer's claim than an inquiry is to be Isinched into alleged London pulice corruption was

Women picket Women picketed a work measure clubs conference in Blackpool as part of a three year battle to achieve equal

Trident protest About 5,000 people are expected

to march through Glasgow next Saturday to protest against the Trident missile.

Cargo ship sinks Seven crew were killed and three others were missing after

Moroccan cargo ahip sank off Vigo, Spain.

Swiss spy claim Switzerland has protested to the Soviet Embassy in Berne about

espionage activities by two of its staff who have since left the Pot-holers found

Two men were rescued from a

pot-hole in Bonsall Moor near Matlock, Derbyshire after being lost for 24 hours.

Chay returns

The first British yacht to finish the Whithread round the world race was United Friendly, skippered by Chay Blyth. It came sixth, almost a week behind the Dutch winner Flyer.

Driver run over

A Coventry van driver was killed by his own vehicle which

apparently rolled over him shortly after being parked.

Gut reaction A New York man weighing 57 stone had 147 lbs of fat removed from his stomach by

surgery. A special operating table had to be built.

About 10,000 marched through Glasgow to protest against the LAIRD GROUP; the transport Pope's planned visit. systems and engineering con-Poland's curiew will be lifted cern, increased taxable profits to for three days over Easter. Edward Heath arrived in China the year ended December 27.
for a seven day visit. Page 20, Lex Back Page for a seven day visit.

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Argentina: behind the Lombard: Sue Cameron on U.S.: why Reagan's support Justinian: Falklands is slipping 19 sovereignty defined 15 Technology: new moves to Editorial comment: the

Management: oiling the wheels for women in

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24 Lax
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8 ntments UK

Unit Trusts ANNUAL STATEMENTS

... For latest Share Index phone 01-246 8025.

Marines destrey helicopter

- Argentine corvette damaged
- Islanders face military rule
- Reinforcements pour in
- Diplomatic moves continue
- No Cabinet changes imminent BP OIL GROUP, the oil refining and marketing arm of British Petroleum in the UK and the Irish Republic reported current cost losses for last year of £126m (£38m). Back





Mario Menendez, Argentinian-appointed governor of the Falkland Islands, in Buenos Aires yesterday. Troop carriers outside the Falkland Island Company offices in Port Stanley show the strength of the invading forces

Tory whips seek to prevent revolt over Falkland Islands

BY PETER RIDDELL, POLITICAL EDITOR

become increasingly belilcose private criticism by Tory MPs for a tough line in Saturday's and explicit in their committee and several public demands for debate. But, as Mr Nott indiment to re-take the Falkland their resignation. and explicit in their commit-ment to re-take the Falkland face of continuing Conservative Party anger over Government

handling of the issue. The Government's freedom of manoeuvre is now severely limited as the Falklands invasion has become a major crisis of Tory Party confidence in the conduct of foreign and defence

Yord Carrington, the Foreign the pressures for the departure support.

Secretary, and Mr John Nott, the of Mr Nott and Lord Carrington There are differences bebefore Secretary, remains prewill become irresistible.

SENIOR MINISTERS have carious in face of widespread

Islands from Argentina, if neces-sary, by armed force, in the hall is that no Ministers have and criticism over the coming offered to resign and no Cabinet weeks if there is armed conflict changes are imminent. and Ministers
Mr Nott said on ITV's Week-

Invasion developments, Page 2; Falkland's sovereignty defined, Page 15; Featur eand Editorial Comment,

end World that he would "unbesitatingly" resign if he lost an attempt to cool tempers after the Prime Minister. "But for line but then attacked the Eden Saturday's heated and entiralime to quit my post at this ing Commons debate. Intense moment would be very damagaritivity is likely in the next two ing indeed for the Government." Defence spokesman, said in the days to avoid a significant backbench rebellion after the full-scale debate scheduled for Wednesday.

The nolitical future of both The Correlation to retake the Falklands fails or there is cheque." The Shadow Cabinet, what is regarded by MPs as which is due to meet today, is a "sell-out" to Argentina then likely to effer only qualified the pressures for the departure support.

Tory MPs were drawing parallels with Suez in 1956, Tory whips were yesterday the confidence of Cabinet and when Labour under Hugb Gaittalking to all back-benchers in parliamentary colleagues and skell initially took a very strong an attempt to cool tempers after the Prime Minister. "But for line but then attacked the Eden

Bankers' immediate concerns

centre on the impact of the

move on their correspondent

banking relationships with

Argentinian banks, interna-tional loans to Argentina and

foreign exchange and money

Treasury officials said yester-

market dealings.

There was cross-party support by Mr Peter Shore and the in-for a tough line in Saturday's stinctively less bellicose attitude of Mr Michael Foot, who scored a much-needed personal success with a highly effective speech on Saturday.

Having failed to anticipate

the invasion, the Government's and Ministers will try to tie internal party problem is that many Tory MPs now feel national honour and party credibility can be restored only by re-taking the islands. Nothing less would be acceptable to

> Whatever the outcome, there will also be strong pressure for a review of defence strategy, in particular the run-down of some of the surface fleet,

One winp reported after talking to MPs yesterday that while there had been a "steadying" since Saturday, the party was still a long way from being in a position where anyone could talk "reality" about the longer-term position of the Falklands.

with London banks.

Continued on Back Page

notices clarifying details later considerably more difficult.

City concerned over

BY WILLIAM HALL AND GARETH GRIFFITHS

The British Government's deci- terday that the move would the Argentine Government or sion to block Argentine assets damage the City's regulation Argentine residents. : beld in the UK and suspend as a neutral international Bank of England will issue The chart shows the two constraints on European Monetary System exchange rates. The upper grid based on the weakest currency in the system defines the closs rates from which no currecy (except the lins) may move more than 2s per cent. The lower chart gives seek currency is directed to the "central rate" against the European Currency Unit (ECU) Itself a basket of European scurancies. beld in the UK and suspend as a neutral international official insurance cover on ex- financial centre. ports to Argentina will severely disrupt UK trade with the area and present major problems for international banks operating Credits (Argentine Republic) in London. Directions 1982, on Saturday,

It is the first time the UK which immediately took effect. Government has taken action The order, made under the to block another country's Emergency Laws (Re-enact-ments and Repeals) Act 1964, Rhodesia declared UDI in prohibits banks from making • DUNLOP AND MICHELIN are to seek international stan-dards for car tyre and wheel sizes, Back Page November 1965, and several payments or transferring funds day that the move was not bankers expressed concern yes- on the instructions of either designed to balt all trade with

• HOECHST UK, part of the German-based chemicals group, warned that widespread replace-ment of brand named drugs by cheaper generic ones would destroy the British pharmaceuti-cal industry. Back Page

• DOWTY, the Cheltenham sed-aucraft components and mining equipment group, is to division workforce by about 850 and close two small subsidiaries.

• LEADERS of 198 unions affiliated to the TUC meet today to begin a compaign against the Government's Employment Bill.

. WOMEN'S PAY should be improved by strengthening legislation and collective bargaining structures says the Low Pay Unit. Page 6

 BANKING, Insurance and Finance Union is urging members to protect their jobs by obstructing the introduction of new technology. Page 6

CASS ELECTRONICS is rots oracle a drive mild tracks gri placing and will be introduced to the Unlisted Securities Market Page 20

is adopted in its entirety. While Mr Reagan declined to systems and engineering con-

a record £16.85m (£13.57m) for

a moderately improved perception of the general business the surv situation, with a better trend moralis-in recent deliveries and orders, There somewhat improved capacity utilisation and greater buoyancy

mcreases would remain in the

BY MAX WILKINSON, ECONOMICS CORRESPONDENT A GENERALLY more opti- 7 per cent to 8 per cent range. capital spending next year. mistic view of British's The trend in unit costs con-However, investment expecta-economic prospects shown by timed cautiously downwards, tions had sunk to a compara-the latest Financial Times but a slightly higher level of tively low level a year ago. The Business Opinion Survey pub- price increases was expected at recent increase may therefore lished today.

an annual 9 per cent. This may
The survey in March showed reflect the generally improved an answal 9 per cent. This may

There was a continued in last two months. crease in optimism that earnutilisation and greater buoyancy ings per share would improve, who expected investment to in-about the prospects for exports. a trend which has been evident crease fell below zero only for The companies interviewed, in the survey for more than a a comparatively short period

were expecting to increase

reflect the moderately more optimistic forecasts for the corlook for profit margins which economy which have been the survey has shown in recent issued by the Treasury and independent bodies during the

The balance of respondents in the building and construction of the building sectors and Perhaps as a reflection of the official data which show that textiles and closing sectors, general improvement in investment held up better than confirmed the general expects business confidence, a larger had been expected during the tion of past surveys that wage proportion of firms said they recession.

Details, Page 8

Britain is prepared to attack Argentine navy, warns Nott BY JIMMY BURNS IN BUENOS AIRES AND DAVID TONGE

FIRST elements of the largest British assault force asembled since Suez will set sail for the Falkland Islands this morning. Mr John Nott, the Defence Minister, warned yesterday that Britain is prepared to attack the Argentine Navy now stationed off Britain's colony, 8,000 miles away in the south

Though stressing Britain's determination to achieve a dip-lomatic solution, he left open the option of an attack on Argentina itself. Ministers are under intense

Atlantic.

pressure from Tory back-benchers to take a tough line. Initial clashes British marines and invading forces on the main island on Friday left one Argentine officer dead and several wounded. It emerged yesterday that on the island of South Georgia. several hundreds of miles away, a small detachment of British troops opened fire on two Argentine helicopters, destroying one and killing at least, three Argentinians. An Argentine naval corvette is also believed to have been damaged by the British marines, who vesterday surrendered island without further resist-

Argentina but it is clear that The Argentines bad been led it will make the problems of to believe that the island was uninhabited, except for unboth importers and exporters armed officials of the British There were widely differing Antarctic survey, and a group of Argentine scrap merchants, views in London yesterday about the effect of the move on whose illegal landing on the Argentina's ability to tap the island two weeks ago sparked off the crisis. There were also international capital markets. London-based banks bave loaned unconfirmed reports in Buenos Argentina 25.8bn while Argen-Aires yesterday that six marines tina only has \$1.4bn on deposit had managed to escape from the Faikland capital, Port Stanley, Some bankers said that Argentina would just borrow in and were organising some resistance among islanders in the

The Argentine occupation forces yesterday imposed strict military rule on the mainly British-speaking 1,700 islanders against the background of persistant local hostility.

The newly-installed milliary

governor, General Benjamia Menendez, issued a statement ordering the islanders to remain in their houses until further notice and threatening anyone breaking the ban with im-mediate imprisonment. Shops and banks were also closed until further notice, and a penalty of 60 days' jail threat-ened for "anyone showing disrespect for the armed forces."

Most Argentine airports and naval bases on the south Atlantic mainland yesterday continued to be the setting for constant troop and supply move-ments, although there was no official confirmation that the Argentine military presence in the Falklands had been increased from its original number of 4.500. Meanwhile, intense die Meanwhile, intense do 12 2

day, involving the two clusters volved in the dispute, as we the U.S., major Eurr governments, and Latin A can countries, like E aimed at heading off a miniconfrontation between fit Argentine and Brilish novics. Argentine President Lepolds Galtieri yesterday said that Argentina would not resign its sovereignty claims over the Falklands and was prepared to defend the islands with "all the means at (Argentina's) disposal" against the threatened British counter-attack.
U.S. diplomats in Buenos

Aires confirmed that Washington was still hoping to mediate Continued on Back Page

Reagan refuses to defer tax cuts

The Government issued

statutory order, the Control of

Gold, Securities, Payments and

BY REGINALD DALE, U.S. EDITOR IN WASHINGTON

soaring budget deficits, and has rejected quick solutions to America's economic problems.

Mr Reagan, who is struggling to recapture the political initiative in the face of mounting opposition to his budgetary and economic poltcles, launched a novel series of five-minute radio broadcasts at the weekend. They are intended to take his

message directly to the Ameri-can people without having it filtered through or truncated by reporters and editors. Mr Reagan's quick-talking

defence of his programme came after the New York Times bad reported that his administration believed that the 1983 budget deficit would be \$124bn (almost £70bn) against the initial February estimate of \$91.5bneven if his controversial budget

PRESIDENT Reagan has again estimates due at the end of this Democratic leader, urged the ruled out any deferral of his week would include "some President in an official response, tax-cutting programme despite technical revisions which might to reconsider his "one-sided" increase the deficit slightly," but not on that scale.

rates were breaking all the rules a willingness on the part of the of the game by refusing to fall, and should come down signifi-cantly. "To do this, a signal must be sent that, while the political process always requires some compromise, government this time intends to stay the course," he said.

He said that the broadcasts reminded him of his earlier work as a radio sports commentator, when he earned \$5 a game broadcasting lows university football games nearly 50 years ago. Mr Reagan tacitly conceded that his economic recovery programme had been slow to take effect. It would only really start with the 10 per cent tax cut should be increased and that due on July 1, he said.

1, 1981, when his first 5 per cent and food stamps, should be restax cut took effect, as the trained.
starting date for recovery. Why Reagan support is slipping, comment on the report, the tax cut took effect, as the Office of Management and starting date for recovery. Budget said that updated budget Mr Jim Wright, the House

business survey optimistic

tax cuts. "I renew the call for some Mr Reagan said that interest flexibility, a little less rigidity, President to recognise the barsh realities of suffering among those nearly 10m Americans who have been thrown out of work," he said.

Mr Pets Domenici, Republican chairman of the Senate budget committee, said that his committee was studying six separate proposals to try to keep the 1983 deficit under \$100bn—none of them President

Reagan's. They were based on the assumption that defence spending should increase in real terms, but less than proposed by Mr Reagan; that revenue the growth of entitlement pro-Last autuum he gave October grammes, such as social security

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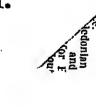
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LONDON W.C.2.



Export cover suspension will hit UK trade

BY PAUL CHEESERIGHT, WORLD TRADE EDITOR

following Government's decision to sus- case, for example, of Iran. pend export insurance cover on goods destined for that country. covered by ECGD, are not

a package of economic concent of British exports to straints to put pressure on Argentina, running at £172.8m Argentina, was described yester in 1980, are backed by the day by the Export Credits ECGD. This is double the Guarantee Department (ECGD) as a "precautionary measure."

decision by the ECGD to refuse exporters the insurance they

Bank to explain details of freeze

were working over the weekend in order to be able to respond sensibly today to inquiries from banks and traders about the impact of the Government's decision to freeze Argentinian assets.

Following the abolition of UK exchange control in October 1979, the Bank has dismantled its facilities for dealing with inquiries, but is expecting to deal with the current situe-tion by issuing notices giving further details within a few

The Government Implemented its decision to freeze Argentinian assets in Britain by leying a statutory instrument, the Control of Gold, Securi-ties, Payments and Credits (Argentine Republic) Directions 1932, before Parliament last Saturday. It took effect immediately.

The preamble to the instrument taken or is likely to be taken by the Government of or persons resident in the Argentine Republic and is Issuing directions under section 2 of the Emergency Laws (Re-enactments and

Repeals) Act 1964. The directions prohibit (except with Treasury permission) any reciplent in the UK, the Chennel Isles or the Isle of Man of an order from the Government of or any reson resident in the gentine Republic from rying out that order in so

as the order: equires the reciplent to make any payment or to part with any gold or securities or, requires any change to be to whose order any gold or securities is to be beld.

BRITISH BASES in Antarctica official British presence in the on South Georgia Closed. have been taken over and continent a slice of which Government

officials were anxious to play down the effects the measures would have on London's standing as financial stressed that they were not and South Georgia.
confiscating Argentinian The Cambridge-ba assets, as ownership would with Argentinian remain residents.

Flag airlines curtail their services

By Michael Donne, Aerospace Correspondent

THE TWO flag airlines flying goes for the kill, Ministers noose already in place around be in part explained by the gentinal of tish Calcdonian in district Ceptific ing bookings of the mail ween London and partition only the entire distance in the entire distance in the case of the wish called to the Treasury despetch of an old Westminster maxim—offered the post by the Prime in politics our opponents sit in front of us and our enemies box to explain the reasons for an ignoral ween London and good to stand when the Commons concentrated day off-loading passengers kill pastengers in place around be in part explained by the his neck underlined the truth of an old Westminster maxim—offered the post by the Prime in politics our opponents sit in front of us and our enemies box to explain the reasons for an ingominious failure.

Mr Nott's unhappy and uncharacteristically ineffective performance when be replied to and the service chiefs soon discovered that it was no idle threat. As every well-informed one of the post by the Prime in politics our opponents sit in front of us and our enemies being upon which be was offered the post by the Prime in politics our opponents sit in front of us and our enemies being upon which be was offered the post by the Prime in politics our opponents sit in front of us and our enemies being upon which the post by the Prime in politics our opponents sit in front of us and our enemies being upon which the post by the Prime in politics our opponents sit in front of us and our enemies being upon which the post by the Prime in politics our opponents sit in front of us and our enemies being upon which the post by the Prime in politics our opponents sit in front of us and our enemies being upon which the post by the Prime in politics our opponents sit in front of us and our enemies being upon which the post by the Prime in politics our opponents sit in front of us and our enemies being upon which the post by the Prime in politics our opponents.

Mr Nott's unhappy and uncharacteristically ineffective branched to the service

hights at Sao Paulo, conning to show the tell-tale signs tinuing the journey to Santiago in Chile by avoiding Argentine air space.

And Paulo, conning to show the tell-tale signs of terminat failure which usually mark a speedy departure to political oblivion.

NEW BRITISH business with demand because of deteriorat-Argentina will be severely ing commercial conditions. Such Department is to decide whether restricted, following the refusals have been made in the to continue cover on the unused the refusals have been made in the

The decision, made as part of affected, bowever. About 60 per worldwide average.

mercial banks but supported by

The immediate problem for the 10.5 per cent on credits of up to

Behind the euphoria; editorial comment, Page 18 Justinian, Page 15

past 18 months through such lines of credit, most of them of as a "precautionary measure."

Most new business in lines of credit, most of them of medium-term maturity.

The cover can be resumed whenever the Government been generated through the prothinks fit, and therefore, is different from an independent of credit provided by the comternational guidelines. Latterly the rates of interest bave been

five years. The Government has bridged the gap between this rate portion of any outstanding credit and the market cost of the funds. lines. Some £40m bas been The suspension of export credit offered to Argentina over the cover bears most beavily on The suspension of export credit cover bears most beavily on exporters of capital and semicapital goods, which are mainly sold on credit terms of between six months and five years.

British exports bave been bunched mainly into this geoeral

category, which embraces specialist machinery and transport equipment ECGD cover bas been historically light at the short-term end of the market, usually associated with consumer goods, and et the long-term end, usuelly associated with capital projects business

tina is less than £300m, indicating that, as a trading partner. Argentina bas been of marginal importance. By contrast, its ex-posure in Poland is nearly fibn and in Romanie £405m. But, especially over the last two years, there has been a greater effort on the part of both Government and exporters to expand sales and win a larger slice of the imports market linked to Argen-tinian development plans.

The menace for the Department is that, in the wake of the suspension of cover, Argentinian buyers may feel emboldened not to honour existing obligations, further straining its already tight financial position.

TASK FORCE PUTS TO SEA TODAY

Naval blockade is likely first action

BY BRIDGET BLOOM, DEPENCE CORRESPONDENT

MR JOHN NOTT, the Defence Secretary, yesterdey reaffirmed that Britain's political objective in the Falklands was to re-BANK OF ENGLAND officials establish British edministration there, if necessary by force. "A very large naval task force " will today be on its way to the South Atlantic, be sald.

Orders to the task force to engage Argentine forces have not yet been given. If and when they are—and the vessels could take two weeks to reach the area — there will be two main military options: blockade of the islands or their invesion. Both present serious problems.

A blockade is initially the most likely. Argentina is anid already to bave up to 5,000 troops on the two main islands, and an invasion could herdly be mounted without substantial risk to the lives and "freedom' of the 1,800 Falkland Islanders whom the British operation would be designed to protect.

The Defence Ministry is releasing only scant details of the task force. It bas acknowledged that HMS Invincible, the says that "the Treasury are newest aircraft carrier (which satisfied that action to the has actually been sold to Ausdetriment of the economic tralla for delivery in 1983) position of the UK is being leads the force, together with the carrier Hermes and the two agoing assault ships, Fearless and Intrepid (reprieved from Mr Nott's defence cuts only last month) is due to leave from Portsmouth today.

It is believed, but not confirmed, that nearly 20 other warships which were last week engaged in Exercise Springtrain off Gibraltar are also being sent south, although there were con-

Merchant ships warned

BRITAIN'S MERCHANT fleet has heen edvised by the Government to stay ont of Argentine waters during the erisis over the Falkland Islands, writes Andrew Fisher. At the weekend there were no British vessels in any Argentine ports, but e 15,000

tonne general cargo carrier, the Banhury, has been ordered by its owners to remain in Montevideo until forther instructions were The Banbury, originally due

to sall to Buenes Aires on Tuesday is carrying a cargo of manufacturing goods for Argentina, and was to take on wonl for export to Europe. The ship is part of the only regular service operated from Britain to Argentina. Known as BRILR—an abreviation of the separate lines involved it is run by Blue Star Line and Furness Withy,
... Mr. William Kirkbride,

one or two logistic lending ships the Argentines, they insist not and one or two fleet replenish- surprisingly that it is no match and one or two fleet replenishment ships are seid to make up a task force of about 30 vessels.

One obvious edvantage this force would give Britein is thet It would be twice the size of the advantage. Argentina at its current Argentine fleet in the

general manager of Furness Withy, said the service covered Brazil, Uruguay and Argentina and earned gross freight revenues of some-£30m a year. But business was larger before Britain joined the EEC which has atrict quotas on meat exports from Argentina. BHLR runs two refrigerated container ships and seven general cargo

Although the service was not a major part of the com-pany's activities Mr Kirkhride pany's activities Mr Kirkhride said: "We are quite concerned and have also edvised some of our expatriots in Argentina to go to Montivideo in the interim period."

Another BHLR ship, the Devon, left Buenos Aires about 10 days are with a refrigers. 10 days ago with a refrigera-ted meat cargo. The Derwent, a general cargo ship was about to atart loading at Liverpoo

before the crisis. -

for its South American trip

nearest is only 400 miles from area—eech country, coincident-ally, having committed at that point about balf its operational fleet.

the Falklands, against Britain's 8,000 miles. Britain's nearest sure aircraft staging post is the Ascension Island/base 3,500

If a blockade is instituted, Britain would declare that Argentine ships would bave a certain number of days to pull out beyond a specified radius of the islands-probably 200 miles. Any ships remaining after that time would be attacked and

The ensuing battle would not be a "gunboat" bettle in the 19th century seese—guns have gone out in favour of highly sophisticated enti-ship and ship-to-air missiles on both sides. Britain's sim would presumably be either to cell an Argentine bluff, or more likely to cause such damage to the Argentine navy as to bring about a political change of

If that did not work, the British force would be left with have dug in massively by this

Britain would need first to try to neutralise enemy strong points, principally by an assault from the air, before being able to land commandos in a belicopter - borne assault. Strategists acknowledge that such an attack (which would presumably also have to involve South Georgia, 800 miles from the main islands) would not only be difficult but almost cer-

tainly costly in lives.

little military alternative but to withdraw or try to invade. It must be assumed that Argentine troops, with air defences, would

Naturally, those advocating it believe such an ettack would be successful, though no one denies

off Gibraltar are also being sent south, although there were conflicting reports yesterday from Gibraltar that they had actually sailed. Additionally, at least two Royal Fleet Auxiliary tankers, UK claims to Antarctic resources at risk

have been taken over and continent, a slice of which — Britain's claim to a share in the between latitudes 20 and 60 potentially large mineral and fishing resources in the southern continent has been neutral international put in leopardy by Argentina's scial centre. They scizure of the Falkland Islands

manned only in the summer, cies. Last year the Treasury The BAS, whose ennual budget sought to cut the BAS budget is under £6m, is the principal and bave the base et Grytviken

degrees West — is claimed by Britain as the British Antarctic

sovereignty over most of this

area. The Territory has The Cambridge-based British officially administered from Antarctic Survey maintains six Port Stanley end its governor has been the governor of the permanent stations in his been the grand Dependen-Antarctica and two which are Falkland Islands and Dependen-

nounced that Britain was to replece the base at Halley early in 1983 et an estimated cost of Territory. Argentina also claims £1m and also replace, at an estimated cost of £4m, Britain's biggest Antarctic research

vessel, HMS Sheckleton.
The U.S. Government has estimated that the recoverable offsbore oil reserves in the region amounted to billiona of berrels, comparable in magnitude to those of the North Sea BP, Arco, Exxon, Gulf and

Texaco are among the com-Last October, It was an panies interested in the region's vil. Large deposits of coal and other minerals, from silver to molybdenum have been dis-.covered.

Air Commodore Brian Frow director general of the Falkland Islands Office, claimed yesterday that oil was at the beart of Argentina's decision to invade. A BP spokesman said: "There ia promising seismic evidence but until we bave done a lot of drilling there we can't be sure what oil is actually there."

Spain gives veiled backing to Argentina

THE SPANISH Government has distanced itself sharply from the EEC by declining to back. Britain over the Falklands and giving velled support for the Argentine

At the same time, there is

concern here that the issue could complicate negotiations with the UK on the future of with the UK on the future of Gibraltar. These are due to begin on April 20, when Spain re-opens the frontier to the Madrid has consistently supported Argentina's claim to the Falklands, referring to them always as the "Islas Malvinas." In the wake of the invasion, the Spanish Cabinet has again endorsed this support, maintaining that Britain bas been prolonging a colonial situation. An official statement said that colonial situations, such as that persisting in the such as that persisting in the Faiklands, could result in "conflicts like the present

While opposing the use of force to resolve such colonial disputes, the statement avoided any call for Argentine

troops.

Sr Leopoldo Calvo Sotelo, the Prime Minister, was care-ful to stete over the weekend that "the problems of Gibraltar and Las Malvinas ere different and distant" Nevertheless, the number of Nevertheless, the number of editorials in the Spanish Press yesterday pointed ont that Britain might new toughen its stand on handing over sovereignty of Gibraltar. Significantly, the Spanish extreme Right has given Argentina outright support and this sector of opinion, with substantial hacking with substantial backing within the armed forces, has been most critical of what it regards as Government concessions to Britain in re-

So far, no one bere has pointed out the significance of the Argentine action in relation to the two Spanish enclaves of Centa and Melilla in North Africa, which are claimed by Morocco.

opening . the frontier-uni-

laterally closed by Spain in

Paris stresses 'solidarity' with Britain By David White in Paris

FRANCE GAVE repeated assurances over the weekend that it stood by Britain over the Falklands crisis. M Claude Cheysson, the Foreign Minis-ter, expressed "solidarity" with London, both in a tele-phone conversation with Lord Carrington and in a meeting with Argentina's ambassador in Paris, according to officials. President Francois Mitter-

rand also spoke by telephone to Mrs Margaret Thatcher on the issue on Saturday. The French Government said it intended to keep in close con-tact with London, but officials gave no further details of the weekend's conversations. .

The Argentine ambassador was received at his request by M Cheysson.

U.S. makes clear it would oppose recapture of islands

BY REGINALD DALE IN WASHINGTON

is making it clear that it will tation. be prepared to mediete, if asked, How in the Falkland Islands dispute, forces and restore the status

However, it is also making it equally clear that it would oppose any British attempt to recapture the islands by force. The invasion bas confronted the Administration with a dilemma, which, it openly admlts, it would prefer not to have to face.

Britain is, of course, a Nato ally, although the Falkland Islands ere outside the ellience's operating area, which extends only as fer south in the Atlantic as the Tropic of Cancer.

Argentina, on the other hand, and the other hand, and the other hand. is one of the principal Latin American countries to which the U.S. is looking for support in its efforts to stem the tide

of guerrilla warfare in El Salvador and other countries of Central America. Officials in Washington feared if Britain were to use force, Atlantic. most Latin American countries The U would rally behind Argentina. The U.S. would not want to be

seen es publicly supporting the British action. The chances are that Washing-

THE REAGAN Administration try to avoid a military confron-

However, officials here at the weekend seemed to have little in which it has repeatedly called Idea of how such a confronta-on Argentina to withdraw its tion could be avolded, given forces and restore the status 'Argentina's determination to keep its forces on the islands and the apparently equally firm determination of Mrs Thatcher's Government to dislodge them.

The U.S. is also formally allied to Argentina under the Inter American Treaty of Reciprocal Assistance, or RIO treaty. It is virtually unthinkable, bowever, that Argentina could invoke the treaty to invoke U.S. military support in the event of e British

support in the event of e British counter-attack on the Islands. While the U.S. has stayed deliberately quiet on the issue of sovereignty over the islands in recent days, it has in the past ecknowledged that they are a large the procession. legitimate British possession. The initiel hilarity in Washington over Britain's discomfiture particularly in the media is now beginning to be sobered by the realisation that there is a real risk of at least limited war in the Southern

The U.S. Press hes on the whole sided with Britain, despite the colonial overtones of

the affair. The Washington Post yesterday auggested that Argentina may bave bitten off a bit ton will use the time it takes more than it can chew and for the British naval force to said: "The Britis have nothing reach the islands to work to apologiso for in the Falk-actively behind the scenes to lands."

Mixed reaction among Latin American countries

BY OUR FOREIGN STAFF

Neither Brazil nop to see any encour emerged y Argentine expansions. City 2 could mean trouble for them. He cast the only negation the other hand there are in the Security Council. many Latin countries which are supporting the Argentine action

sovereignty, has supported the invasion, while Uruguay, which acted as a staging post for the Falkland Islands governor and the party of Royal Marines expelled from Port Stanley has aunounced that it nevertheless supported the Argentine case. Instead, a period of intense diplomatic activity may be in prospect in the bope that pro-gress towards a negotiated settlement can be made before the British naval task force reaches the South Atlantic in up to a fortnight's time.

Sir Anthony Parsons, the

WITH MAJORITY sentiment in British delegate, said London the United Nations opposed to would welcome the belp of third the Argentine invasion of the party negotiators. This was Falkland Islands, Latin America offered in the Council by the

Falkland Islands, Latin America offered in the Council by the has adopted a surprisingly mixed reaction to the affair.

Brazil has binted that it states is to meet in Washingmight allow the British naval ton later today at Argentina's force to refuel in Brazilian ports on its way southwards, while sentiment in Chile, which has lis own tense border dispute country's action in the Council with Argentina over possession. with Argentina over possession on Saturday, will seek the of three small islands off the organisation's support. coast of Tierra del Fuego is not sympathetic to the Argentine Foreign Minister, who made a

Foreign Minister, who made a strong attack on Britain, calling it an impérialistinal colonialist power, is expected also to address the special OAS session. He cast the only negative vote in the Seast-in Careful.

During the debates that preceded the Council vote, several Latin American states which are Guatemala, which is still eye not Council members, spoke in support of Argentina's sovereign claim. Among these was Brazil which appealed to both sides to act with moderation and avoid aggravating tension in the

Bolivia spoke of Britain's "in-vasion by force" 150 years ago and said Argentina's willingness to negotiate had "foiled."

Peru, one of whose citizens. Sr Javier Perez de Cuellar, is now the UN Secretary General, said the root cause of the prob-lem was Britain's usurpation, "act of plunder" and installation of a foreign population in the Falklands.

Backbenchers tighten noose round Nott in Commons debate

Argentine air space.
Aerolineas Argentinas is flying from Buenos Aires to Europe box collecting bis speech notes but is terminating its flights as ministerial colleagues left the Chatham dockyard closure, at Madrid, instead of coming on to London.

box collecting bis speech notes stituency is being hit by the Chatham dockyard closure, the Chatham dockyard closure, whose stituency is being hit by the Chatham dockyard closure, should "resign, resign," at Mr

the debate made Tory hack-henchers squirm, and one ostentatiously buried his feec in his hands. The debete ended in uproar, and Mrs Thatcher sat with her head bowed and look-ing strained. Some Conservaing strained. Some Conserva-tives, including Sir Frederick Burden, whose Gillingham con-

employ to anything like the extent demanded by Mrs Thatcher. He offered to resign rather than ask any one of the three services—particularly the Royal Navy's surface fleet—to operate below the strength and level of efficiency necessary to

ON THE RARE occasions when a united House of Commons Tory benches to tighten the secretary is still in office can Britain's foreign policy commitgoes for the kill. Ministers noose aiready in place around be in part explained by the ments, including the honouring of the pledges given by successive governments to defend the

Mr Nott marched into the Saturday's debate produced Ministry of Defence building in some atriking similarities and Whitehall in January 1981 a number of remarkable con-

sitting.
On November 3, 1956, the
House was noisily and totally
divided with Sir Anthony Eden
the Prime Minister, who bad ordered the RAF to start bombing Egyptian airfields some 48 hours earlier, still the hero of the hour on the Tory benches. Mr Hugh Galtskell, the Labour

leader, who bad warned from the start that the Opposition would support British intervention in Egypt only if the Government bad secured the prior approval of the United Nations, was subjected to venomous attacks for persisting with his "law not war" cam-paign when he knew that British forces were engaged in combat

and a further Anglo-French invasion force was likely to start fighting its way along the banks of the canal at any time. A remarkable transformation of roles on Saturday saw Mrs Margaret Thatcher give a stumbling performance as she tried to put a veneer of respectability on the Government's failure to mount the naval and military

Falkland Islands. On the other hand, Mr Michael Foot, in the most authoritative and impressive speech be bas delivered in the Commons since becoming leader of the Opposition, was praised from the Tory benches for having "spoken for Britain" in maintaining that Argentine's unprovoked aggression must not be allowed to go

While firmly declaring the Government's aim to repossess the Falkland Islands, Mrs Thetcher was never at her best. She is painfully aware that the very fact that the Conservative Party's image makers bave devoted so much effort to presenting her as the Iron Lady aa she squares up to the Soviet Union's President Brezhnev operation needed to prevent Union's President Brezhnev Argentine's invasion of the must inevitably expose ber to

ridicule after the Government's display of ineptitude in protecting British interests

Equally alarming for the Prime Minister was the chilling response of the Tory benches at

crucial points in her speech. As Selwyn Lloyd, Foreign Secretary at the time of Suez, acknowledged later their is nothing more disheartening for a Minister than "cold disapproving, apparently incredulous silence." This was something which Sir Anthony Eden experienced after the abandon ment of the Snez operation

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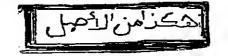
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Fraser set for showdown over party leadership

The state had been in Liberal

Of the split in the Liberal ranks, Mr Fraser said in Mel-

bourne: "If by our own division

we help bring about the circum-stances in which Labour's

socialism can again have the opportunity to destroy Australia,

we should hang our heads in

support range from 20 to 40 members of the S1-strong Parliamentary Liberal Party,

though ha has not yet delivered

a formal challenge to Mr Fraser

Opposition leader, said yesterday

Mr Ball Hayden, the Federal

been largely fought on state

But he claimed that the

Government's loss of credibility,

its "disastrous handling" of the

national economy, and its internal conflicts, had played a

Dr Oteiba said so far as he

ing in Nigeria had made a

is confirmed that oil companies

or any other side have taken

measures against any member

country to force it to reduce its prices by refusing to execute

a contract, at that time we will hold an emergency meeting

Dr Oteiba again suggested

that the companies were playing a political role in attempt-

ing to force Opec into price cuts. "Their position with regard to Nigeria is a good example of this. We will con-

tinue to support Nigeria to sell

its quota which was set in

There were further reports in

the Gulf yesterday that Saudi

favourable response.

Estimates of Mr

hands since 1955.

BY MICHAEL THOMPSON-NOEL IN SYDNEY

SHOWDOWN over Mr Victoria is estimated at 4.3 per Malcolm Fraser's leadership of cent—more than twice what it the Australian Liberal Party needed to wrest power. has been set for Thursday.

The Prime Minister announced last night that he was calling a meeting of the Parliamentary Liberal Party to face up to the leadership issue and end the speculation once and for all."

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Ann Sogn

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Hille

His move followed the Australian Labour Party's sweeping success in the Victoria state elections at tha

Mr Fraser faces a challenge to his leadership from Mr Andrew Peacock, a former Cabinet Minister, who repeated his call yesterday for a "change of direction in federal Liberal, that the Victoria election had

within the Liberal Party that is critical of Mr Fraser's handling of the economy, and worried by the party's wantng political for-

The swing to the ALP in role too.

ORGANISATION

may be backing away from an

immediate confrontation with

the international oil com-

pames over the level of produc-

Dr Mana Said al-Oteiba, presi-

dent of Opec, said yesterday that the oil companies had

reacted positively to threats of

production levels in an effort to

force down the price of Nigerian

Sheik Ahmed Zaki Yamani, Saudi Arabia's Minister of Oil,

said in London last week that plans were being made for an

emergency Opec meeting to dis-

cuss the threat to Nigeria.

Exports from Nigeria have fallen sharply since the Vienna

decision of Opec to set output

compared with \$31 a barrel for the San

sanctions if they dropped their immediately."

tion in Nigeria.

Opec may be retreating

from clash with companies

Petroleum Exporting Countries knew all the companies operat-

the \$34 a harryl reference price. Arabia was considering another for Saudi light. Nigeria is cure out in its production levels. Tently charging \$35.50 a barrel, After the Vienna Opec meeting,

comparable crude from the duction by 500,000 barrels to an average of 7m a day,

PLO awaits 'retaliation'

Spadolini fights to save

elections later this year. His first challenge comes

The Christian Democratical teadership, ever more embarrassed by the ramifications of the Cirillo affair, have demanded the Minister's recking But with the templish

Even if Sig Spadolini does find a compromise to satisfy both sides, he still faces potential trouble over the

EEC budget talks

isters had been due to meet vented Lord Carrington, the

Gromyko visit

ter, arrived in Belgrade on Sunday for a two-day visit and the first high-level con-tact between Moscow and Yugoslavia in the post-Tito AP reports from

Herd destroyed

A herd of cattle and pigs was destroyed in Denmark yester-day as foot-and-mouth disease

coalition

SIG GIOVANNI SPADOLINI, the Italian Prime Minister. this week faces his toughest task yet in preventing the collapse of his five-party coalition, sending the country almost certainly into general

today when he attempts to defuse the row between Christian Democrats and Socialists over accusations by Socialist Minister that the former acted improperly in paying a ransom for the release of Sig Ciro Crillo, a Naples party councillor held last year by the Red Brigades

sacking. But with the implicit backing of his party, he has maintained his charges.

1982 Finance Bill, for which several dangerous confidence votes may be required if its approval is to be secured before Easter as scheduled.

Sig Bettino Ciaxi, the Socialist leader, yesterday promised his party's backing to push the Finance Bill, vital for what remains of the Government's economic policy, on to the statute book. At any time thereafter, however, might come the moment of reckoning, he implied,

Key negotiations by EEC Foreign Ministers on cutting back Britain's payments to the Community budget will now take place on April 27 in Luxembourg, writes John Wyles in Brussels. The Minon Saturday, but the session was postponed because the Falkland Islands crisis pre-British Foreign Secretary, from attending.

Mr Andrei Gromyko, the Soviet Union's Foreign Minis-

Belgrade.
Mr Gronyko will confer with Mr Sergej Krajger, head of Yugoslavia's collective Presidency and Mr Dusan Dragosavac, President of the Yugoslav Communist Party.

struck again dashing hopes that the epidemic on the island of Feunen had ended, AP reports from Copenhagen. It was the 12th confirmed case since the virus, assumed to have reached Denmark from East Germany, set off the alarm two weeks ago. More than 2,500 bead of cattle and pigs have been killed.

in Lebanon are braced for a possible Israeli retaliation after Foreign Ministry. Jerusalem organisation of responsibility for the assassination in Paris on Saturday of Mr Jacov Broasimantov, an attache at the Braeki embassy An anonymous caller told Press offices in Beirut "the Lebanese armed revolutionary factions" were responsible for tha murder of the Israeli diplomat. He added that "more surprises should be apported." The diplomat was shot and killed by an unknown woman who then escaped. Mr Meir Rosen, the Israeli ambassador in France, was quick to blame the PLO. Tha accusation This is an Invitation to Buckle Down

in the State of ARKANSAS They call Arkansas the "buckle" of Americas Sunbelt. Its central location puts a market of over 100m people within 550 miles reach - just 24 hours by road. And the newly opened Arkansas River Waterway connects the heart of the State with the port of New Orleans and thence to Europe and Latin America.

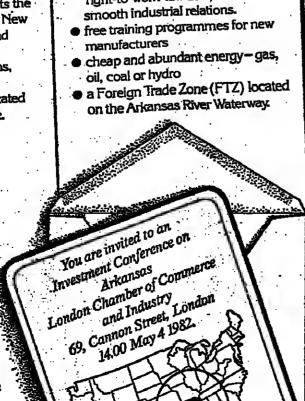
Over 140 top US corporations, as well as several European and Japanese companies have all located manufacturing plants in the state.

COME AND FIND OUT WHY at a complimentary half-day seminar and reception on May 4 at the London Chamber of Commerce and Industry. The meeting will feature presentations by key business and civic leaders from Arkansas and the State's European Industrial Development Office.

Members of the delegation will also be available for individual appointments on May 5.

These are just some of the reason's why one independent study rated Arkansas the fifth most attractive US state for business and industry:

For further information or registration contact Ian Weatherhead at the Chamber, 69 Cannon Street, London EC4N5AB. Telephone 01-248 4444 ext 305.



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buildings, and plant

free site searching

EUROPE'S PETROCHEMICAL CRISIS

Substantial decline in exports outlook

تعكنامن الأحل

EUROPE'S loss-making petro- But it warns: "The European have closed 48m tonnes-147 capacity over the last 15 months, according to analysts at W. Greenwell, a stockbroking firm. But Greenwell says that "nowhere near enough" plants have yet been shnt down. It stresses that in the "worst" product areas between 30 per cent and 40 per cent of capacity needs to "disappear."

Greenwell spells out the extent of Western Europe'a overcapacity in such products as ethylene—the so-called building block of the petrochemical ing block of the petrochemical industry—and major plastic materials like polyethylene, polypropylene and polystyrene. It welcomes the fact that "at long last the European industry has begun to hite the bullet."

SHIPPING REPORT

SHIPOWNERS

costs in the present dismal state

of world shipping markets.

Lambert Brothers Shipping said

As a result, shipowners were

having to find more cash from

within their companies or from

outside to cover losses, or to

renegotiate or defer loan pay-

Another alternative, Lambert

their fleets to professional managers of large fleets able to

cut costs through economies of

Speaking in Oslo last week,

in its latest review.

Revenue crisis deepens

for world's shipowners

scarcely able to pay their crews and cover other direct operating than waiting until times became

added, was to entrust the care of of loan interest repayments.

BY ANDREW FISHER, SHIPPING CORRESPONDENT

chemical and plastics producers petrochemical and bulk plastics industries are still engaged in a per cent-of their effective fight for survival—any helief that time or others can solve the problems for it is a sure recipe for lasting and total disaster." Greenwell's survey suggests

that since the end of 1980 West European producers have sbut down some 16 per cent of their effective ethylena capacity, 27 per cent of low density poly-ethylene capacity, 9 per cent of high density polyethylene, 8 per cent of polystyrene, 6.5 per cent of polystyrene, including expanded polystyrene, and 7 per cent of polyvinyl chloride

(PVC).
These closures are described as "encouraging." But the Greenwell report warns that Europe "must not lose sight of

are should now be looking at

Mr J. Magne Haga, a general

"Wise shipowners will

manager of Christiania Bank

come to see us on deferments and refinancing nine to 12

He told journalists that his

bank was now talking to

customers to suggest deferments

deferment yet and that worries

Mr Haga said his remarks were

not meant to refer only to the

months before events occur."

Major Petrochemical Companies Trend Toward Specialisation

chemicals (excluding fertilisers), fine chemicals, etc. Source: W. Greenwell

the build-up of petrochemical and plastics capacity in the Middle East. The report says that by 1990 it expects the Middla East and North Africa, which are currently developing petrochemicals and plastics industries of their own, to have

a 650,000-tonnes-a-year surplus of low density and a 210,000tonnes a year surplus of high density polyethylene plastic.
"As a result of these, and

other, moves to muscle in on the traditional producers, prospects for most European exports of petrochemicals and plastics are poor," the report says. "For example, net exports of hulk plastics could drop from the current level of around 1m tonnes a year to a mere 400,000 tonnes a year by 1990."

The Greenwell report goes on say that the answer to the industry's problem cannot lie in a "wholesale shift of the bulk producers into speciality chemicals and plastics."

"Specialisation can only be justified if you bave the technical and existing skills in the

Zimbabwe order for UK

BY OUR WORLD TRADE STAFF

WADE ADAMS Construction of has been awarded the contract for the raising of the Sebakwe Dam near Que Que in Zimbabwe. Wade Adams/Andrews and Kidd won the Z\$13.5m (£10.5m)

contract against competition from Roberts Construction, Cementation International and Gulliver/Fairlough.

The project is scheduled to the UK, in a joint venture with run for three years and involves Andrews and Kidd of Zimbabwe, raising a concrete dam wall, preprestressing and earthworks. • The Weir Group has won a £8m contract from U.I.E., a member of the French Amrep group, to supply and design a water injection system for the Meren offshore oil field in

World Economic Indicators

FOREIGN EXCHANGE RESERVES

USA West Germany Netherlands Belgium Japan Italy France	9,534 37,467 7,654 3,264 24,579 17,790 Dec '81 19,976	39,645 8,071 3,767 24,716 18,617 Nov'81 19,518	40,443 7,961 4,110 25,035 17,020 Oct '81 19,464	44,3 9,9 6,4 22,7 20,4 Dec' 25,3 Source: Il
UK	Jan '82. 12,587	(US\$m) Dec '81 12,810 9,774	Nov '81 13,114 10,732	jan *8 18,71 10,66

U.S. groups win major Indonesian plant deals

By Richard Lambert in New York

U.S. COMPANIES have won contracts for two major projects in Indonesia. Kaiser Engineers and Kaiser Almminum, two unrelated companies, are taking a leading role in the construction of a 600,000 metric tonne a year alumina refinery. Total cost of the alumina plant will eventually be \$900m.

At the same time, Kellogg Overseas Corporation, along with Kobe Steel and Toyo Menka Kaisha of Japan, has been awarded a contract worth around \$350m to supply a fertiliser complex in East Kalimantan.

The alumina facility will be built on Bintan island, southast of Singapore, for P. J. Aneka Tambang, a Government corporation. The bauxite supply will be mined locally and most of the production will be shipped to a new smelter on Sumatra Island. Production is to start in 1985. Kaiser Engineers, a unit of Raymond International of Texas, will provide design. engineering and technical services for the contract. Technical assistance will come from Kaiser Aluminum.

The fertiliser project which has been awarded by P. T. Pupuk Kalimantan Timur (Kaltim) is for a 1,500 metric ton a day fertiliser ammonia plant, a 1,725 metric-ton-a-day urea plant and various asso-ciated facilities. This project is also expected to go into operation in 1985.

Kellogg, a member of the M. W. Kellogg group of com-panies, will provide technology for the ammonia plant. Technology for the urea plant will come from Stamicarbon, for which Kellogg is a world-

a leading expert in shipping Norwegian industry, but to the finance emphasised that owners whole shipping world. The Alternative Approach to Banking

THE HIGHER THE MANAGER/CUSTOMER RATIO

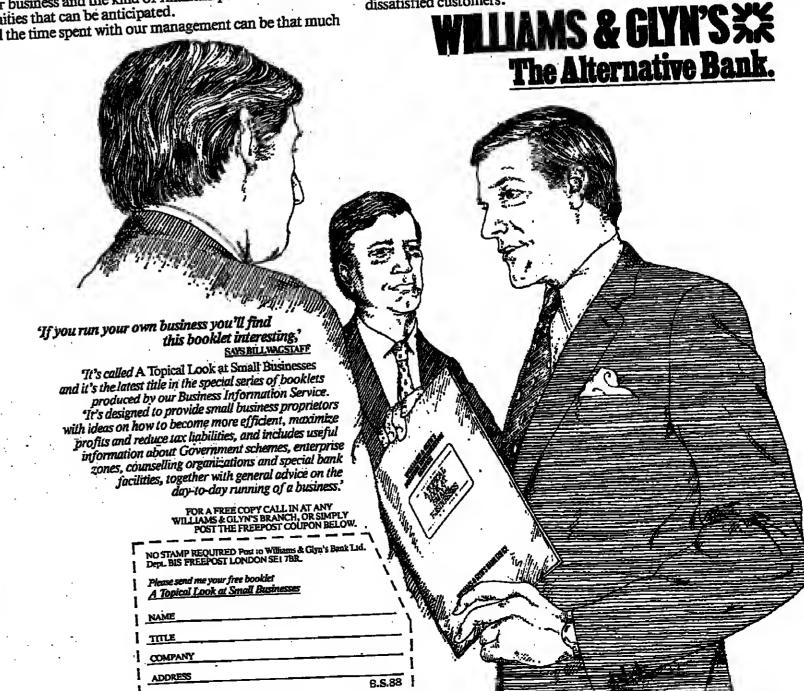
We have more managers per customer than the other main High Street banks. That, in our view, is the way it should be, and that's the way we aim to keep it. It gives us distinct advantages over other banks which new customers are quick to recognise; particularly business customers, for whom it is supremely important to have ready access to their local branch management at all times. And at all places. Our managers make a point of visiting customers on their own ground as often as possible, to make sure they have a really thorough appreciation of each particular business and the kind of financial problems and opportunities that can be anticipated.

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more valuable, too, because the tightly-knit way we're structured means that our mana gers in their turn have ready access to all our top banking specialists, who are always ready to attend meetings, give on-the-spot advice, and when necessary make on-the-spot It all adds up to a whole new approach to banking, a

refreshing change from the kind of branch management lethargy that is so often generated by ponderous pomposity at the top. So if you see your bank manager once in a blue moon, don't

wait for the next blue moon, come and see us. We welcome dissatisfied customers.



CBI supports existing local rates system

paigning against the rates burden on industry, has told the Government the rating system should none the less remain the. mainstay of local taxation.

In response to the Green Paper called Alternatives to Domestic Rates the confedera-tion says the rating system. needs urgent reform, to ensure it does not discriminate against business ratepayers and to give more local accountability.

The confederation does not believe, however, that the case has been made for introducing local income-, sales- nr polltaxes to replace or supplement rates. It recommends that sub-

THE Confederation of British ject to changes both domestic and business rates should be

In particular it wants & measure of business derating introduced now. It suggests a 15 per cent level, which would cost about £720m a year at 1981-82 prices.

The confederation wants: a limit nn business rate rises. The limit would prevent increases rising faster than either the inflation rate or the increase in local taxation on indi- met from local domestic

It also seeks abolition of rating of empty premises, nr at least a cut to the level needed to pay for services from which such premises benefit, such as

The confederation also says business ratepayers should have the same right as domestic ones to pay rates by instalment. "We recognise this will

adversely affect the cash-flow of local authorities but in the coment recession the cash-flow of business should be of far. greater concern to the Govern-The confederation concludes

that more local rate- and grant-borne expenditure should be It suggests, however, this does not mean domestic rates would

central government would almost halve local authority expenditure but concludes this would require detailed inquiry. "In the last analysis, although financial aspects are important, have to rise in absolute terms, because-local spending could be. the overriding interest must be the achievement of the bighest cut, and fees and charges quality of education, relevant to

sectors, by raising efficiency and

by tailoring provision to real

consumer need. Savings of at least £500m a

year should be sought by these

means, while an all-round 5 per

cent rise in efficiency would

The confederation says trans-

ferring funding of education to

save £1.5bn

It calls for cuts in local the needs of the nation and of spending by leaving some services to private and voluntary Severe price-cutting in the Severe price-cutting in the North has led to a collapse of private-sector industrial prices, today by the CBI's northern

> It said 54 per cent of companies surveyed, cut some prices to other companies ove the past year; 55 per cent held prices of some products steady; 67 per cent raised prices by limited amounts only and 84 per cent said there was strong resistance to increases from other companies in the bome market. The picture in export markets was almost exactly tha

Brixton: The tough task of converting words into action

some of whose recommendations increasingly arousing

Government Ministers, the private sector, including a Nigerian chief, academics and American blacks with the experience of black self-belp projects, have put forward a variety of initiatives.

Obviously, there are no easy solutions to problems which are not all specific to Brixton and which span the whole of Britain's inner city areas, where about 40 per ceot of ethnic minorities live and where the problems of economic decline, physical decay and adverse social factors feed

upon one another. Three proposals illustrate the problems of transferring projects into action. They include the Government's inner city are not catered for at the partnership funding to Lam-beth, which in 1981-82 was Club. Mr Leo Clowden, a black £9.75m, increased in 1982-83 to more than £12m, the local action plan for a new shopping revenue project of this kind, so centre and a police crime preventioo campaign.

This year, for the first time, two applications from the out ways of supporting the voluntary sector for capital project, but is aware of the funding from the inner city pitfalis. For if the purposepartnership bave come from non-established black groups, members of "the alienated bard funding for running costs, a three-acre site to the south

SINCE THE riots in Brixton, A year after the riots, Lisa Wood looks at what is thousands of words bave been written about this south London. inner-city area. They include a major report by Lord Scarman,

> activities nn Railton Road, now half derelict but the proposed sight of a large bousing estate, a project brought forward by the council after the riots. . Whereas last year, unemployent amnug young West Indians

under 19 years of age was estimated at about 60 per cent, it is now estimated at mnre than 70 per cent in a borough where male unemployment, at 19.4 per cent in December, bas increased by 50 per cent during the last

The major project is a suffer a loss of cultural centre—the Afro support grant." Caribbean Centre-costed over a three-year period at some £1m. It is intended for people, from 18 upwards, whose needs are not catered for at the Club. Mr Leo Clowden, a black social worker, said: "Central government will not fund a outline of running costs."

Lambeth Council is working built centre is built but organisers cannot provide full

Sydney with its distinctive Harbour Bridge

lts world-famous Opera House is a masterpièce. of modern architecture-and Swiss engineering skill.

vestment management, etc. etc. etc.

is the business centre of Australia.

core" of Brixton's black Lambeth Council may have to of Cold Harbour Lane. unemployed, who centre their pick up the bill. Mr Jeremy Brown, L Mr Ted Knight, leader of the Council, said: "We are not putting up any obstacles to these projects, but are taking care to point out that the valuntary groups should be planning revenue costs.

"We are already picking up the revenue costs for projects whose revenue allocations from partnership funding bas expired. In 1982-83, the revenue commitments of Lambeth Council to partnersbip-inspired projects will be £1.6m, for which we will suffer a loss of £900,000 in rate

A second new relationship the council bas developed over the last year is with its multiple retailers, who, after the riots, set up a seven-strong "We're Backing Brixton " campaign and started to liaise with the mittee was involved in obtaining £100,000 partnership money for enviroomental improvements to

the town centre. Confidence of retailers in the area bas been increased by the council's local structure plan, which includes the development of a medium-scale new shopping centre and 150-odd new flats on

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world a branch

of the key Swiss bank

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business.

Singapore, Atlanta and elsewhere. The phones start ringing and another

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capitalize on opportunities when and where they arise.

Mr Jeremy Brown, Lambeth's new chief town planner, said:
"The development would not involve a radical reshaping of Brixton, but it would attract an injection of private capital to the area. There are large the area. developers genuinely interested, and the fear is that, if the council dithers, they may go

" Some members feel that the private sector ought not to be given the opportunity in the area, after years of not invest-ing in Brixton, but all agree that the lack of a decision over the decay of Brixton."

But last month, the Council's Labour group and the Social Chamber voted against putting the plan on deposit for six the statutory period required before the action plan either goes to local inquiry or is put out to tender.

The Labour group, according to Mr Knight, took the decision because of opposition from some local residents, whose homes would be affected by the

Wider consultation is now of reported crime figures and planned, "with those 50,000 said they were still being people who live in walking harassed by the police.

distance of Brixton and who, in the council's view, should not be opposed by small groups in the community." At the same time, Mr Knight said: "Once we deposit the plan and, if there is a public inquiry, the Environ-ment Secretary can intervene. We have not been harmy with We have not been happy with the Secretary of State's intervention on other planning

The Social Democrats, who are strongly contesting the local election in Lambeth next month, have opposed the pre-sent development in its mani-festo. Mr Patrick Mitchell, of Lambeth's SDP, said: "We are sceptical of a large-scala new development in Brixton; there is no scopa for Brixton challeng ing a shopping development

like Croydon. In the shorter term, tha immediate preoccupation in Brixton appears to concern crime and policing. A recent Crime Prevention Campaign, launched, according to the police inadvertently on the eve of pub-lication of Metropolitan crime figures which broke down the ethnic origin of offenders, afforded sections of the commun ity to give vent to their feelings. Many white residents, at the meeting in Lambeth Town Hall, called for stronger police action against muggings while young blacks questioned the accuracy

Business

never sleeps. Whether in

Sydney, Zurich, London

or Tokyo, there's a stock

exchange open and the

indexes, and market ups

cabled round the world.

ways sunrise somewhere

And it's al-

and some of our 14500

employees start work in

Los Angeles, Bahrain,

Swiss Bank Corporation Schweizerischer Bankverein

Société de Banque Suisse

The key Swiss bank.

latest gold fixings.

and downs are being

Trend is to small units. **Cadbury** chief says

LARGE companies are likely to come under increasing pressure from social and economic trends to split their businesses into smaller units, according to Sir Adrian Cadhury, chairman of Cadhury

Sir Adrian, a leading figure n the Confederation of British Industry, says in the magazine Personnel Management that in a highly competitive world of slow growth, any business organised with traditional large-scale overheads would lose out against more flexible rivals.

Smaller businesses could adapt rapidly to marketplace and cost changes, and could buy in services instead of providing them directly.
Sir Adrian expects that large companies will make elements of their businesses as independent as possible, with each section stripping ont non-essential activities. He predicts a growth in self-empleyed people — often former managers—providing services like administration, computing and design.

Levels of economic growth of the 1950s and 1960s are

unlikely to return this century, Sir Adrian says. Businesses would bave to operate in the present unpredictable environment and accept the likelihood that it would become less rather than more stable.

Apart from the impact nf this economic climate on the organisation of companies, he predicts a change in working babits which might lead to people contracting to supply a specified number of bours a greater freedom to organise their working lives.

BIM guide to help expanding companies

A CHECKLIST to help smaller companies thinking of buying another business has been published by the British Insti-

tute of Management.

The guide, "Buying a company—A checklist guide to successful acquisitions for the smaller company," lists more than 260 questions which can be used to make an appraisal of a businesses

value and prospects.

The guide points out that although intuition and business experience play a key role, knowing exactly what is being bought is of funda-mental importance.

Shotton gasholder to be blown up

A WELSH industrial landmark will disappear today when a 155-foot high gasholder is blown up at Shotton steel werks. North Wales. Thirty explosive charges embedded in the im cubic feet bolder are due to blow down the 1,000-ion structure. Because of the size and shape of the holder, a 16-sided tank more than 100 ft wide, special pre-weakening bas had in be done in help the explosives.

Business failures soar in first quarter

TRADE INDEMNITY. tha credit insurance under-writers, has disclosed a 15 per cent increase in business failures in the first quarter of 1982 compared with the same quarter of 1931.

Mr Hugh Dowell, Trade
Indemnity's assistant general

manager, said that in January the business failure rate seemed to be easing, but scened to be easing, but since them, there had been a steady deterioration. Business failures notified to us in February and March increased by 25 and 30 per cent respectively, compared with the same month in 1981.

NatWest to help small engineering groups

NATIONAL Bank is to sponsor a move by the London Enterprise Agency to belp small graineering companies.

The agency, backed by several big companies, is

proposing a computerised supplied identification system which would give purchasing managers quick access te com-prehensive infermation about the capabilities of potential suppliers or sub-contractors.

£400.000 air payout Castle Donington the east midlands airport near Derby,

has doubled to £400,000 the share of operating profits it pays to the local authority consortium which owns it.

Chariots of Fire

In Thursday's story in the Financial Times about film financing in the wake of the Oscar successes of Charlots of Fire, it sheuld be made clear that the Twentieth Century Fox Film Corporation and Allied Stars were 50/50 partners in providing \$3m each for the film's production finance. Goldcrest Films and Television, a Pearson Long-man subsidiary financed the initial development costs.

Small groups want to set public pay levels

BY PHILIP BASSETT, L'ABOUR CORRESPONDENT

the Civil Service, according to the Association of Independent

The group, formerly the Smaller Businesses Association, represents small companies employing a total of about 5m workers. In evidence to tha Government's inquiry into Civil Service pay, it says the public sector structure sets pay, benefits and conditions of service "at a level that our members, forced to pay only that which can be eaned, are unabla to match."

The inquiry, chaired by Sir John Megaw, is dua to report by mid-summer in time for the 1983 pay settlement for 530,000 white-collar civil servants.

The national economic committee of the association says that the central issue for the inquiry is deciding which pay level is correct—that traditionally set for civil servants, nr that afforded to the associa-

be used to determine levels for siderable vexation that in the Civil Service, both pensions and redundancy payments have been so very much out of line with what can be afforded by our members," it says. Both these items should be linked to the standard in the small private

> Alan Pike writes: The Institute of Directors has told the inquiry that annual com-parability exercises on Civil Service pay should be abolished and replaced by a two tier locally-based bargaining system, Two tier bargaining is a necessary step towards the decentra-lisation of pay determination in the Civil Service, the institute

The proposed first tier would basic rates, with second tier bargaining on a departmental or regional basis. To avoid leap-frogging or attempts to renegotiate agreements at local level, cash limits should apply to both levels.

FT story leads to cash boost for furniture maker

AN AMERICAN nil business-man is to invest £100,000 from his own resources in a small Liverpool reproduction furniture manufacturing company after reading about its activities in the Financial Times in August.

specialises in producing copies nf period furniture and made a point of recruiting into its labour force—now 30 strong—unemployed ynuths, and of training them in cabinet-making skills. It is planning to open a training worksbop for 100 young people with sponsorship from the charity, the Rathbone Trust, and with financial aid from the Maopower Services Commission this autumn Commission this autumn.

This commitment to youthand the company's range of products which have been sold from the Middle East to the U.S. -strongly appealed to Mr Harry Logan, president and chief executive officer of United Refining of Pennsylvania until its take-over last year by Coal Oil, and now its vice-chairman. Mr Logan said: "I have spent all my life in the petroleum industry where one never sees the end product, and I was looking for an interest as far away as possible from oil. Furniture fitted the bill because it is tangible and beautiful. At the same time this is a company which is preserving nld skills

and training the young to work with their hands. "It is creating something of. value and satisfaction and furthermore giving young people a reason to look to the future with more confidence." After reading the Financial Times story, Mr Logan, whose parents came from Britain, com-missioned a report from Gostlins' owners Mr and Mrs David Simpson on their operation and last antumn made the

first of several visits.

Mr Simpson said: "He asked men.

how much was needed to expand the company so that it could take on orders which were having to be turned away and when we said about £63,000 would pay for new machinery he suggested a rounded-up total of £100,000."

Under the deal arranged on Friday between the Simpsons and their surprise benefactor, Mr Logan will take a sleeping per cent stake in a new limited company which is to be formed. Describing his stake as an investment in the Simpsons and their ideals Mr Logan said yesterday he would be playing only a very limited role in the company which would be left to develop as it saw best.

The funds Mr. Logan is mak-ing available will according to Mr Simpson enable new machinery to be bought which will release craftsmen from some of the more laborious chores such as sanding. This in turn will enable more nrders to be undertaken and will make it possible to increase the overall labour force and the contribution which the company can make through its craftsmen to the training venture. Several craftsmen, some of whom worked in the Merseyside shipyards fitting out luxury liners, bave been brought out of retirement by Gostins to help train apprentices in dying

The company has orders standing at more than £100,000 for a range of products which Speke Hall—a nearby timbered house—Welsh sers, four poster beds and desks. About 80 per cent of furniture is exported to the U.S., which Simpson visits twice a year to talk to interior designers. The link with Mr Logan is expected to bring the company valuable contacts with a number of top U.S. business-

Countryside Commission opens up to the public

THE COUNTRYSIDE Commission, which was made independent last week, has launched a new prospectus opening up ins policies and priorities to public

The commission announced last week that it intends to devote more resources to conservation and give higher. priority to resolving conflicts between voluntary groups and the private sector.

First Net. Fin. Corp... 151% First Nat. Secs. Ltd... 151% Robert Fraser 14 %

More money is to be spent on development grants for ment.

voluntary bodies and there is to be an annual award scheme, with the Country Landowners' Association, for public or private landowners who make notable achievements in improving understanding between town

and country.

The commission's change of status, from April 1 this year, was provided for by the Wildlife and Countryside Act. The commission is now less dependent on the Civil Service and directly accountable to parlia-

Call deposits 21,000 and over

21-day deposits over £1,000 113-%;

Demend deposits 104%,

BASE LENDING RATES

A.B.N. Bank 13 % Allied Irish Bank 13 % Heritable & Gen. Trust 13 Hill Samuel 513 Henry Ansbacher 13 Arbuthoot Latham 13 Hill Samuel 513
C. Hoare & Co. 113
Hongkong & Shanghai 13
Kingsnorth Trust Ltd. 14
Knowsley & Co. Ltd. 13
Lioyds Bank 13
Mellichall Limited 13 Arbuthoot Latham 13 %
Associates Cap. Corp. 13 %
Banco de Bilbao 13 %
BCCI 13 %
Bank Happalim BM 13 % Edward Maoson & Co. Midland Bank Samuel Mootagu 13

Morgan Grenfell 13

National Westminster 13

Norwich General Trust 13

P. S. Refson & Co. 13 la Tamise S.A. 131% Barciays Bank 13 % Beneficial Trust Ltd. 14 % Roxburghe Guarantee E. S. Schwab Slavenburg's Bank Standard Chartered ... Bremar Holdings Ltd. 14 Brit. Bank of Mid. East 13 Brown Shipley 13 %
Canada Perm't Trust... 13 %
Castle Court Trust Ltd. 13 %
Cavendish G'ty T'st Ltd. 13 % Trade Dev. Bank Trustee Savings Bank 13 Cayzer Ltd. 13 Cedar Holdings 13 ■ Charterhouse Japhet ... 13 Wintrust Secs. Ltd. ... 13 Yorkshire Bank 13 Citibank Savings Clydesdala Bank Mambers of the Accepting Houses Committee. 7-day deposits 10%, 1-month 10.25%. Short term 28,000/12 month 12.6%. Co-operative Bank 13 Corinthian Secs. 13 The Cyprus Popular Bk. 13 7-day deposits on eums of: under £10,000 10%. £10,000 up to £50,000 11%. £50,000 and over Duncan Lawrie 13 Eagli Trust 13 E.T. Trust 13 Exeter Trust Ltd. 14

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THE START of a new financial

rear means various adjustments

in tax payments by individuals.

For the past three years it bas

also meant increases in the

National Insurance contribu-

tions paid by employees and the .

self-employed — contributions

security tax.

are contracted out

extra £67.33 a year.

that can be regarded as a social

From this week, employees

earning at least £220 a week will

pay on extra £3.75 a week on NI

contributions if they are in the state scheme and £3.32 if they

A selfemployed person earn-ing £11,000 a year will pay an

which were announced by Sir Geoffrey Howe, the Chancellor,

at the beginning of December, arise from two factors. All employees are having their con-

tribution rates increased by 1 per cent for the second year in

succession, though the rates for

their employers remain unchanged Secondly, both employees and employers will have those contribution rates

applied to higher earnings limits because of inflation.

The Government has been quietly changing the financing

structure of the National Insur-

ance scheme, putting more of a

reducing the direct cost to the

cent of bis relevant earnings.

If the individual was born

Top earners start to pay

higher NI contributions

21.57

this year from 141 per cent to

13 per cent of combined em-

ployee employer, contributions.

tion rate by employees is

The Government helieves

extensions are proposed to the increase has been allowed in able to take tax relief on scheme of tax relief for retire—the figures for older savers, but annuities paid to retired partment annuity premiums paid by the real change is for those ners; under the present law.

This is a welcome assistance

before 1916, the amount on for those in their 50s who see three out of his last seven which tax relief is given is to retirement approaching.

THE PROPOSED closure of a closure will cast doubts over tomorrow to seek support for the

area Europe's worst unemploy employees, the European MPs month that it proposed to close ment blackspot, according to a will meet Mr Adam Butler, Brown and Adam because of group representing the 300 Minister of State for Northern high costs and to transfer the

Brown and Adam dye works, give 16 a 18.4m proposal to yesterday that according to local part of the Moygashel fabric modernise the works. management, a government contains, has been taken up by Union leaders and other offer of 5 per cent of the cost Northern Ireland's three-Euro-members of the works com- of modernisation would provide MPs. They believe the mittee will fly to London the basis for negotiations.

Ireland, tomorrow to ask what work to Samuel Heaps, support the Government will The workers' committee said

Threat of 50% jobless in Dungannon

instead of 17} per cent.

increased by I per cent.

Treasury. of the National Health Service For the second year running should come from direct con-

a self-employed person. Such born between 1916 and 1933.

an individual gets tax relief on they will now get tax relief on his contributions up to 171 per 20 per cent of relevant earnings

Courtailds' fabric dyeing and the remaining 460 jobs in the

finishing plant at Dungannon, Moygashel group.

Northern Ireland, will make the With representatives of the

The campaign to save the support the Government will

Retirement tax relief boosted

19.62

into at the ration a in telephone in the period of the man internal and intern

on the city of the Post of a be-

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Midlands plea for action on Japan

BY ARTHUR SMITH, MIDLANDS CORRESPONDENT THE West Midlands regional penies representing the full ship first and talk later," Mr council of the Confederation of range of industry had expressed Rankin said.

On the economic front, West There was a need to make Midlands companies reported

action to improve the balance of European companies and to curb settlements. Many had deferre trade with Japan. "There is a feeling that the An initiative might be taken were between 4 and 6 per cent injustrial base of the region is on a national or an EEC basis. It was thought that although being eroded" Mr Steve Rankin The CBI was already pressing this level could be sustained for

the flow of Japanese imports. regional director, said last night. The case but companies in the a period, the upwards pressure "We are fast ranning out of West Midlands thought the was building. There must be immediate situation needed to be treated action." Mr Rankin said com- with urgency. "The Japanese market seems likely to continue.

Government to take immediate There was a need to make Midlands companies reported for take immediate Japan open its market to growing resistance to low pay any award but average deals



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Maiden flight for new Euro **Airbus**

By Michael Donne,

entirely from direct taxation. A

costs should be met by those

employees still working rather

than hy employees and em-

ployers. It bas kept the extra

NI contribution hurden on

The earnings ceiling on which

contributions are levied is being raised from £200 to £220 a

week in line with inflation. The

lower earning limit under which

people earning below this

figure do not pay NI contribu-tions is lifted from £27 to £29.50

Sir Geoffrey announced in this year's Budget that the NI

Sorcharge rate on employers' contributions is being reduced

by one point to 21 per cent. But this will not come into effect

until August. This surcharge is

effectively a payroll tax with

the contributions going straight

to the Treasury. They are not paid to the NI fund.

The self-employed are having

their flat rate weekly Class 2

contribution, paid by all self-

employed, increased by 35p to

£3.75. In addition, the Class 4

rate is lifted from 5; to 6 per

cent of annual profit between

increased in line with inflation

each year. The amount of the annuity is linked to the retired

partner's earnings for the best

proposal from Mr Christopher

Hogg, the Courtaulds chairman Courtaulds announced last

employers to a minimum.

further 0.1 per cent of the rate increase goes towards the NHS. The remaining 0.65 per cent European Airbus, the 210-seat of the rate increase arises to meet the costs of bigher un-A-310, made its marden flight from the Airbus Industrie's employment. The Government Saturday. bas decided that such increased

1983 to the launching cus-tomers, Swisseir and Luft-

The A-310 is designed to carry up to 210 passengers over short to medium ranges. It is a twin-engined aircraft, with operators having the choice of U.S. General Electric CF6-80A or Pratt and Whitney engines. Orders for 180 A-310s have been placed by 15 airlines. Of

the UK at night.

by rail.

the aircraft fly back to their

original airports. The Post

Office Is now sending about

10 per cent of all first class

mail by air freight at night.

Until about two years ago, it

sent all its long distance moil

Post Office trains eriss-cross

the country with postmen on

hoard sorting the mail while

travelling at speeds of np to 100 mph, In addition, ordinary

passenger trains carry moil.

The problem is that the

timing of departures and the

reduction in train services

over the years means it is

physically impossible to get a

letter posted late in, say,

Devenshire to Aberdeen by

next morning, by train

Each night, 43 travelling

the others are options. than older-generation narrow-

Why inland post is carried by air Jason Crisp describes a night flight delivering the Post Office mail

هكذامنالأجل

THE LATEST version of the flight test centre at Toulouse on

The eircraft was airborne for 3 hours 15 minutes, in what was described as a perfect test move into an extended flight test programme, prior to certification and delivery in March,

The A-310 is built by Airbus Industrie, in which British Aerospace has a 20 per cent stake, building the wings and also having an overall design consultancy role in the aircraft.

these 90 are firm orders and

The feature of the aircraft is its aubstantially lower fuel consumption, claimed to he up to 35 per cent less per seat bodied jet airliners, giving savings of up to \$2m (f1.1m) a year in fuel costs at today's prices.

Five A-310s will be involved in the flight test programme. The first two aircraft, powered by Pratt and Whitney engines (destined for Swissair), and the third aircraft, powered by General Electric engines (for Lufthansa), will be used for the actual flight tests. The fourth and fifth aircraft off the line (destined for Lufthansa and Swissair respectively) will be used for route-proving trials. EVERY WEEKDAY night at Air transport of mail began after the Post Office came around 11 o'clock an assorted uoder heavy criticism for the collection of 16 aeroplanes Britaio to reodezvons at dropped to an oppailingly low level. Becouse of this, the Government included provi-Liverpool airport of midnight. movement of civil aircraft in sions in the British Telecommnnications Bill, passed last year, which sanctioned it to lift the mail monopoly if services fell below certain At Speke, in a sudden and brief finrry of activity, a million letters change hands and

The Post Office has a Government-set target to deliver 90 per cent of first class letters on the following working day, which it is now

elose to meeting. British Rall carries around 70 per eent of the mail and the Post Office is one of its lorgest customers. During the rail strike, the volume of air freighted mall rose sharply. diminishing the impact of the

action on mail delivery. The aircraft are chartered from five different airlines-Express Air Services, Iceni Aviation, Eastern Airways, Jersey European Airways. and Dan-Air. They fly from 13 destinations including Belfast, Aberdeen, Exeter, Cardiff,

Bonrnemouth, Bristol, Glasgow and Gatwick. Last week, I flew with Dan-Air oo the Gatwlek to Liver-

pool flight which then goes on to Belfast. The aircraft was a British Aerospace 748 turbo-prop, with the seats folded and stacked along the side of the passenger compartment. The nircraft was filled almost to the ceiling with mail bags which weighed 41 tonnes, and were held in harnesses. By the following morning, the seats were to be back in place and the aircraft was used for ferrying passengers. (It normally passengers. carries a maximum of just under 50 passengers.)

At Speke, the 16 aircraft are parked in a close group and are rapidly unloaded by about 30 alrpori oulliority staff. The mail hags are moved to a small warehouse for soriing by the Post Office where there is a staff of 18.

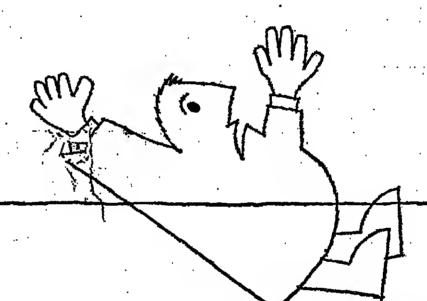
Eleven postmen sort the bags. They cry out the destination of each bag for .a checker to note before laconically lobbing it into a ring

with a different location for the retorning alreraft. By about 1.30 am the operation Is complete, with 4,500 bags weighting 45 toones flying on

tu major sorting offices around the country. The operation is centred on mately equidistant from the other airports, is open at night and is relatively fog-

The Pust Office also has a fleet of seven aircraft chartered from Air Ecosse for Datapost its premium overnight service which was originally taooched to carry computer tapes around the heen painted Pusi Office red with the Datapost livery, and fly to 10 centres around the

country, including Speke. Datapost now has over 20,000 contract customers and carries a wide range of urgent goods from parts to documents. The carriage of nrgent smoll areos which was opened up for competition by the British Telecommunications



Have you recently found yourself becoming an involuntary non-profit organization?

The earnings reports of many companies are experiencing a widespread outbreak of parentheses. (We mean those depressing bow-legged punctuations

that signify operating losses in balance sheets.) In fact, the problem of diminishing profitability is widespread enough to have acquired an aura of immutability, something like a law of contemporary economics...making it sound almost audacious to

suggest the problem is solvable. Perhaps it's time for a little audacity...and a

Data General ECLIPSE® computer. ECLIPSE is a complete information system that will never be accused of insufficient ambition: its mission is to help cause immediate and dramatic improvement in

your bottom line. It does this by helping you instantly identify

inventories carried unprofitably, back orders being filled tardily, cash flow problems...those areas where profits often erode unseen by management.

It isn't surprising, then, to find an ECLIPSE computer turning up in so many profit-making organisations, like Express Dairy Foods, North Thames Gas and Guinness Group Sales (Ireland).

In fact, many of the largest and most successful

British companies in banking industry, distribution and services are using Data General computers. Is this a stunning coincidence or a considerable profit opportunity? Those who still believe in opportunities are invited to write for particulars to: Marketing Communications, Data General Limited, 3rd and 4th Floors, Hounslow

House, 724-734 London Road, Hounslow, Middlesex

TW3 1PD. Tel: 01-572 7455.

Data General

Rights for those who will not join a union

ONLY ONE part of the Employment Bill was a complete surprise: that was Clause 1, which enables "the Secretary of State to make payments to wards compensating individuals who in certain past cases have been dismissed for failure to conform to the requirements of a union membership agreement (closed shop)."

Curiously, the inspiriation for the clause came to Mr Norman Tebbit, the Employment Secretary, from a report which, of those who will benefit from though still unpublished is thought not to he particularly said that further cesearch needs crutical of the closed shop.

Strathelyde University, under all, is the so-called "Hull Six" look a major study of the in—six Hull City Council stitution in 1978, financed by employees dismissed for re-the Employment Department, fusing to join a union once Hull One section of the report notes that ahout 325 individuals were dismissed from their johs between 1974 and 1980 hecause they refused to join closed

Mr Tebbil decided that the waters should not close over the heads of the victims. He therefore set aside £2m, or a little more than £6.000 per person, with which in make amends. It was an unusual step for retrospective legislation is not popular in Westminster. However, according to Mr Walter way it was done," an objection staff from eight to two. Mr Armstrong's case, and that of his colleagues, has heen championed by Mr Philip Hamer, a Hull solicitor. He has secured a ruling from the European Court that the Hull Six's case would fall under the same judgment terms as those of the dismissed railwaymen whose case was won in ever, according to Mr Walter Goldsmith, director general of a close adviser to Mr Tebhit. a close adviser to Mr Tebhit, "The thing just seemed so receive compensation from the retrospective legislation is cut and dried. There was no £2m fund once the Employment perfectly valid if it cights balloting of the staff, It was just Bill is enacted. wrong, but not if it wrongs a said that this was now a con-



eliciting from Mr Tebbit details the fund. His department has Professor John Gennard, of which may be representative of

museum attendant. Only one- staff from eight to two.

rong, but not if it wrongs a said that this was now a con. The final measure on the ight."

The Labour upposition bas the result of a process on which was thoroughly expected.

TWO CLAUSES extend the restrictions on the closed shop to include:

●In Clause 1, a measure to pay state compensation to workers dismissed for not joining a union closed shop between 1974 and 1980:

• In Clause 10, a measure to make void any term in a contract specifying union labour only, and making it unlawful to discriminate against a contractor on union membership grounds.

I had not been represented. I Clause 10 seeks to outlaw the think that each of us in our own way thought we had been deprived of that wonderful freedom of voting with our

Ironically, Mr Armstrong now had agreed a closed shop in says he appears likely to he forced to enjoy that freedom.

Of the six five were manual workers, and included a huilding foreman, a plumber and a will shortly cut its archaelogical

way it was done," an objection whose case was won in which appears the other five Strashourg last year. Mr Armshared.

expected. trades secretary for the Trags- ground.

practice of specifying that contract work will be performed by union organised companies, a practice common among local authorities, in the huilding industry and in the print.

The major henefit to unions of seeking to ensure union-labour only contracting is, of course, the extension of uniopisation. They also argue that where nonunion contractors' lahour works with unioned labour at lower rates of pay, tensions and

disruptions are engendered. Fleet Street managements will not seek to race them to the harricades. The practices associated with the closed shop are so ingrained that they will be difficult to change even if practices.

south-east cegion, argued power fully at a left-wing trace

That same weekend, it b came clear that the print umon

Will the unions convince their members to dafend the closed shop in all its ramifica-tions? And if they do, will they wait for an employers atlack which never comes? Mi Goldsmith, and the Government with him, believes the issue to he one of personal freedom and the securing of greater efficiency through breaking the degree of control unions exercisa on work

The unions argue tha so, which it probably does not, personal liberty can be ensured Proviocial newspapers, how- but only if bargaining strength ever, and printing generally, is secured first and that attacks though, may be a different on the closed shop are an inquestion. vitation to disruption. The Mr Peter Kavannagh, building hattle still waits on a hattle-

unionists' conference last wee end that this measure in the Bill could set the construction industry alight.

especially the Nation Graphical Association, bad to the other unions that they would simply defy the clause and others on the closed shop —and would expect TUC support for doing so.

Both construction and print have proved comhustible areas for industrial law in this last decade, and could he so again. The building trade employers wanted the clause, and must now be willing to use it, gambling that the very high levels of unemployment will damp down incipient flames.

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

	Date Current	Title Concrete Society Exhibition and Conference (01-730
-		Concrete Society Exhibition and Conference (01-730 8252) (until Apr 7)
	Apc 7-14	Rismingham Motor Show (Ubuz 51202)
	Apr 9-18	International Motorcycle Show (0203 27427)
	Apr 18-19	British Pet Industry Exhibition (0233 36656)
	Apr 19-23	International Fire Security and Safety Exhibition —IFSSEC (01-388 7661)
	Арг 20-22	All Flectronics Show (0799 22612)
	Apr 22-24	International Proparty Exhibition (01-499 8311)
rs'		International Ideal Homes Exhibition (021-705
er- i	Apr 22-May 3	
de i		6707)
k.	Apr 23-25	Computer Fair (01-643 8040)
he	Apr 26-30	Storage Handling and Distribution Exhibition-SHD
	•	/61_446_24111
OD.	Apr 28-29	EIA Engineering Exhibition—ENGEX (0403 69390)
į	Apr 20-20	EIA Enguieering Danivision Character (01-955 1900)
æ.	.May 4-7	Home and Contract Textiles Show (01-385 1200)
	May 8-10	Optrafair (01-405 8101)
ns,	May 9-11	Rvitish Coaft Trade Fair (0282 867153)
ıai (May 11-13	Microcomputer Show (09274 28211)
lal ld	3160 11-10	Withformbaret proa facet apert)

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Olympia Barbican Centre

NEC. Birmingham

Sandown Park, Esher

Exhibition Centre, Harrogate Wembley Conference Centre

Olympia NEC, Birmingham

Earls Court

Met. Exbn. Hall, Brighton Bingley Hall NEG, Birmingbam Exhibition Centre, Harrogate

ł		THADE LAME AND	
	Apr 14-23	National Mechanics Trade Fair (01-486 8686) International Elactronic Packaging and Production	Sao Patrio
	Apr 15-34	Equipment Exhibition — INTERNEPCON (0483 38085)	Peking
ı	Apc 20-25	International Building Exhibition—FINNBUILD (01-486 1951)	Helsinki
	Apr 22-26	International Carpet, Wallpapers, Wall Coverings and Furnishing Textiles Exhibition—PARITEX (01-489 3964)	Paria
1	Apr 25-29	Agricultural Industry Exhibition—SAUDI-AGRI- CULTURE (01-486 1951)	
1	-	Health, Safety and Environment at Work Exhibi- tion—ARBO (01-228 2880)	Amsterdam
1	Apr 27-30	Biochemical and Instrumental Analysis Exhibition	Munich

| Apr 27-30 | Biochemical and Instrumental Analysis Exhibition (01-488 1951) | May 1-5 | Fast Food and Catering Exhibition (01-935 6200) | Offshore Technology Conference and Exhibition (01-486 1951) | KORTEX S2—Korea International Textile Machinery Exhibition (Seoul 778 0821) | May 11-14 | SITEV 82 International Exhibition of the Suppliers of the Vehicle Industry (Geneva (4122) 32.98.08) | May 11-14 | SITEV 82 International Exhibition of the Suppliers of the Vehicle Industry (Geneva (4122) |

BUSINESS AND MANAGEMENT CONFERENCES University of Leeds: Freight Transport Policy-

	The Role of New Technology (0532 35036)	T
1	(until Apr 7)	Harrogate .
Apr 5-6	American Tax Institute in Europe: Foreign Invest-	
ł	ment io U.S. Real Property (Apr. 6); UK	Maldonf Tintol 1470
,	Taxation of International Operations	Waldorf Hotel, WC2
	(Paris 256 3370)	Cinganora
Apr 6-7	Lloyd's of London Press: Ship Finance (01-730 2182)	Singapore
Apr 7	The Henley School for Forecasting: Corporate	Z-mdo- Desca Contra
	Plans after the Budget (01-353 9961)	London Press Centre
Apr 14-15	The Economist: Economic Regulation in Practice	
l	-Enforcement procedures and their implica-	University College, Oxford
l	tions for industry (01-839 7000)	Offiverally Cornege, Oxford
Apr 16	ESC: Current issues in financial reporting (057	Resustan Conf. Contro. 5371
	282 2711)	Bowater Conf. Centre, SW1
Apr 19-20	The Textile Institute: Structure and Properties of	THETCH Mancheston
	Modern Fibres (061-834 \$457)	UMIST, Manchester
Apr 21	The Henley Centre for Forecasting: Exchange Rates	Tonday Pross Contra
4 :- 01 00	in the Eighties (01-353 9961)	London Press Centre
Apr 21-23	INSIG: International Banking Seminar—Banks and	D-uis
	Computers (Paris 7630724)	Paris
Apr 21-22	Crown Eagle Communications: Franchising (01-636	CH. Lin TT-A-1 TITE
	0617)	Churchill Hotel, W1
Apr 22-25	NAPF 1982 Annual Conference (01-681 2017)	Bournemouth
Apr 26-27	International Chamber of Commerce: Financial	
1	Futures Markets (Paris 261.85.97)	Zurich.
Ape 26-30	Lloyd's of London Press: International Maritime	
	Seminar on Law of Collisions (01-353 1000)	Southampton
Apr 28	Arab-British Chamber of Commerce: Focus on	
[Saudi Arabia (01-629 1249)	Hornton Street, WS
Apr 29	IPS: Electronics—the industrial buyer's guide.	
l	(0990 23711)	Penta Hotel, London
May 4-6	IPM: London Personnel Management Conference	
	(01-946 9100)	Royal Lancaster Hotel, WS
May 4-8	Institute of Metal Finishing: Annual conference	
	and exhibition (021-622 7387)	. The Old Ship Hotel, Brighton
May 7	City Seminars: Financial futures-Setting up a	
	futures operation (01-629 8863)	Cariton Tower Hotel, SW1
May 11-12	FT Conference: Gold and the International Mone-	
	tary System (01-621 1355)	Montreux · · · ·
May 11	Oyez IBC: SSAPs Accounting standards in practice.	
	(01-242 - 2481)	Carlton Tower Hotel, SW1
May 12	The Textile Institute: New dimensions in kulited	
0.40	· fabrics (061-834 8457)	Holiday Inn Hotel, Leicester
May 13-15	Gordon Simmons Research: Efficient retail manage-	
	ment in the changing 1980s environment (01-	
	240 0256)	Grand Hotel, Easthourne
May 14	Dun and Bradstreet: Purchasing from abroad-for	
	commercial executives buying from abroad	
	(01-247 4377)	Cafe Royal, W1
May 17-21	Institute of Personnel Management: Selecting the	
	right candidate (01-946 9100)	Whites Hotel, W2
May 19	The Filtration Society: Cost efficient filtration (01.	
	686 6330)	Copa Hotel, WC1
Annona michina 4		
with ministral a	attend any of the above events is advised to	receptione the organisers to
	ensure that there has been no change in the detail	s prousted

Scunthorpe steel job cuts agreed

UNIONS and management at British Steel Corporation's Scunthorpe works have reached agreement on a programme of 702 redundancies to be implemented before

The new redundancy plans will reduce the workforce at BSC's Scunthorpe works to 8.914 against a total of almost 20.000 five years ago. As a result, anemployment among men in the town is expected to top 30 per cent.

Under the agreement signed by the Iron and Steel Trades Confederation, the union, and a number of smaller unions, steelworkers are to be encouraged to take voluntary ecdundancy with an immediate pension at the age of 55 in the case of men and 50 in the case of women.

Scunthorpe's BSC works is £20m-£25m for the 1981-82

VOLKSWAGEN INTERNATIONAL

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73/4% US-S-Bonds of 1978/1985

Drawing of Bonds as per June 1, 1982

For the tourth redemption instalment due June 1, 1982 in the nomi-

nal amount of US-\$ 5,000,000.-a drawing by lot took place before

a notary public, pursuant to § 3 of the Terms and Conditions of the

The Series D

The drawn Bonds shall be redeemed at par from June 1, 1982 and

Coupens as per June 1, 1983 and following are to be attached to

the Bonds. The amount of missing unmatured coupons will be

Amsterdam, March 1982

Volkswagen International Finance N.V.

ucted from the principal amount. The coupon as per June 1.

with the numbers 3 001 to 4 000 (US-S 1,000 each) and 8 201 to 8 600 (US-\$ 10,000 each)

The Bonds will be paid in the United States of America at

shall cease to bear interest as per May 31, 1982.

Commerzbank Aktiengesellschaft,

and outside the United States of America at

Commerzbank Aktiengesellschaft

New York Branch

and its branch offices.

1982 will be paid separately.

GMWU ballot on Labour leader sought

BY JOHN LLOYD, LABOUR EDITOR

CALLS - FOR membership the Lahour Party are included in the preliminary agenda for the annual conference of the General and Municipal Workers Union in

Further motions regret the dld not reflect union policy.

the deputy leadership election last year, claiming that the vote

A number of resolutions also ency, while another condemns Oldham, which urges "that the of no confidence in the party "because II has disregarded Its

GMWU's executive decision 10 and urgent consideration to vole for Mr Denis Healey in any future 6nancial aid we may contemplate giving to the Labour Party" because of the Infiltration of the Militant Tend-

The sole motion on member-

duty to the working class that it is representing during its time in opposition."

ship of the European Community could result in a switch in the nnion's position if it is debated. Last year the CMWII's One motion calls for "serious debated. Last year the GMWU's and urgent consideration to switch from qualified support of pro-EEC position and might any future 6 nancial aid we may the EEC 10 opposition was have a similar effect on the contemplate giving to the instrumental in swinging the TUC. A number of senior TUC TUC into an anti-EEC position.

ballots before the block vote is express concern over the spills the party's decision to conduct next Lahour government recast for leader or deputy leader in the Labour Party, and the an inquiry into the far left negotiate new terms of member of the Labour Party are Buxton branch calls for a vote group. ship of the EEC that will be of more benefit to the UK, or alternatively withdraw member-ship from the EEC."

If carried, the motion would The motion is proposed by about the anti-European policy.

Bank union warns staff of new technology jobs threat

BY BRIAN GROOM, LABOUR STAFF

THE BANKING, Insurance and new technology agreements. trying to require by spreading secretary, said that while no specific flashpoints had yet

the introduction of technology by employers who have refused

Finance Union is lauoching a spring campaign 10 alert workers to the dangers of redundancies resulting from the introduction of new technology on employers' terms.

The union's executive has a specific flashpoints had yet arisen over new equipment, and give the union a substantial substantial instore banking, increasing and give the union a substantial say in decisions on equipment.

The union's executive has a specific flashpoints had yet arisen over new equipment, arisen over new equipment, there had been concern over the banking, increasing increasing and give the union a substantial say in decisions on equipment.

The union's executive has a specific flashpoints had yet arisen over new equipment, there had been concern over the analysis of auto-tellers, and increasing soft union redundancies at Lombacd North and yet point of sales point of sales arisen over new equipment, and yet point of sales point of sales point of sales arisen over new equipment, and yet point of sales poin agreed to advise members mongering" about the employ activists, but often meet "when necessary" to obstruct ment effects of new technology, anothy, among staffs generally. and believe that It is merely Mr Leif Mills, Bifu general pany.

Central, a National Westminster

Call for equal pay laws to be strengthened

BY JOHN LLOYD, LABOUR EDITOR

union organisation to improve wnmen's pay is made today by the Low Pay Unit.

The unil's report, Women: Work and Wages, says women tices or procedures alone is earn less than 75 per cent of unlikely to lead to a significant male average earnings for every hour worked. They comprise 60 per cent of the low-paid though

of the paid workforce.

The report says the movement lowards equal pay between 1970-76 has halted and in some ases heen reversed in the past few years.

The report's authors base their findings on research done for the Employment Depart-ment in the 1970s. They say employers have been able to evade coual pay laws by moving men or women out of jobs to avnid equal-pay comparisons. It says the main reasons for ow pay among women workers is that they are conrectrated in

CALL for the strengthening must often work part-time, or exisling laws and greater in high-turnover industries, to on organisation to improve take time off for family responsibilities.

The authors say: "The removal of discriminatory pracreduction in job-segregation in

he near future.
"Without more positive they represent 30 per cent only of the paid workforce.

The report says the movement towards equal pay between barriers which limit women's opportunities at work, women are likely to remain among the low paid."

They propose: Strengthening existing laws. tn promote positive action to hreak down the effects of past discrimination: A positive action. through

programmes introduced by collective-bargaining and greater union nrganisation women workers; and Extended parental leave, the traditional low-wage indus-tries or are in lower grades of and job-sharing and better daybetter-paid sectors. Women care facilities for children.

Insurance staff vote today on 8% wage offer By Our Labour Editor

LEGAL AND GENERAL staff vote today on an 8 per cent pay offer from the company which union officials have

already rejected. Mr James Terry, divisional officer for the Association of Scientific, Technical and Managerial Staffs, said last night that the offer was derisory and he expected overwhelming rejection. The union organises about half of L and G's 5,000 staff.

Mr Terry said company profits had risen by 36 per cent in the past year, and dividends paid to shareholders had risen by 44 per cent.

Perkins claim

SHOP STEWARDS representing 5.000 production wurkers at the Perkins diesel-engine plant at Peterborough, Cam-bridgeshire, bave demanded a 12 per cent pay rise. The increase would give £13 more a week to senior skilled men

Financial Times Conferences

WORLD ELECTRONICS — The U.S., Japan and Europe:

Competition or Collaboration? London — June 9 and 10, 1982

lapan's emergence as a major world force in electronics and the resulting reactions in the United lapan's emergence as a major world force in electronics and the resulting reactions in the United States, long used to industry leadership, and in Europe are the main themes of this conference. Many vital issues of business strategy and public policy are raised by this conference with expert commentary by the impressive panel of speakers in government and the industry from Japan, the United States and Europe. They include Mr Gordon Moore, Chairman of the Board Intel Corporation; Mr Taiyu Kobayashi, Chairman of the Board Fujitsu Limited; Mr Llonel Olmer, the U.S. Under Secretary for International Trade; Mr Keiya Toyonaga, Adviser to MITI: Mr C. van der Klugt, Vice-Chairman of Philips Industries; and Sir Richard Cave, Chairman of Thorn EMI plc.

THE ECONOMICS OF NATURAL GAS DEVELOPMENT Venice — June 21 and 22, 1982

This important FT energy seminar, co-sponsored by Jensen Associates of Boston, is to be beld in Venice immediately following the IGU meeting in Lausanne. The sponsors believe that the occasion will provide a unique opportunity to assess the future for gas in developing countries, and the programme will include speakers from Thailand and Mexico who will be outlining their development proposals. A special feature of the programme will be a presentation where the issues and constraints related to natural gas development will be considered by a panel of four speakers from the World related to natural gas development will be considered by a panel of four speakers from the World Bank. Registrations will be limited.

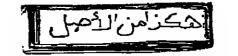
All enquiries should be addressed to: The Financial Times Limited Conference Organisation Minster House. Arthur Street London EC4R 9AX

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> point-to-point communications etween the dishes, mounted on rooftops of business premises, opens up an interesting prospect, particularly in the hanking and financial world.

In fact, the band will support about several hundred channels. Because the range is restricted to a few kilometres, presumably each town could use the same set of channels without mutual interference. Companies that at present have buildings in a town that talk to each other over dedicated phone lines (at less than 9600 band capacity) might well find the

system of interest at £2,250. GE (U.S.A.) is working on a high speed data system that can handle multiplexed signals over a 2 km range. It will be available in the summer. Applications might include connection of remote terminals to mainframes in factory computer systems, or perhaps CAD, and use as a cost effective trunk line between private PABXs in different buildings. More on

Testing a Gemlink system at GE's Owensboro, Kentucky, plant

cost-effective alternative to dedicated lines and to other systems using lasers and in-frared techniques.

هكذامن الأجل

Microwave link offers

cheaper communications

At the moment, these bands are relatively uncluttered says GE. Since no cable is required, no wayleave problems

Optical disc holds 1.25 gigabytes

hole" system of data recording. the Drexier Technology Corpora-tion of Mountain View, it cannot be altered. tion of Mountain View, California has designed an advanced optical memory disc. 12 inches across, that can hold

THE HOME OFFICE has granted GE (U.S.A.) a de-

monstration licence for its

Gemlink microwave fixed link

equipment operating in the 21 to 23 GHz frequency band.

in this private users' band at

various times but has not

been cheap and has really

only attracted users with large

amounts of information to

GE (U.S.A.), by employing a solid-state Gunn diode oscil-

lator as the microwave source

and operating at low power

has kept the cost down to £2,250 for a system that will

transmit and receive at 9600

Using a straight receiver this gives a range of about

3 km, with the superhet ver-sion about 8 km. The equip-ment is small and unobtru-

sive; it weighs only 10 Ib and looks a little like a spot-

light. More sensitive receivers can be provided.

at the moment, one intended for sending television chan-

nel (with slightly less range) and the 2600 band unit for control/telemetry applica-tions. This can accept four

signal formats: tones, pulse

width modulation, frequency

shift keying and digital en-

coding.
The company says it is

Two versions are designed

transmit.

on analysed images from a TV camera placed further

shapes of each passing com-ponent are derived as a unique code that will then

tell, say, a paint spraying robot what patiern of spray-

One of the applications tackled by British Robotic

Systems required the visual

system to recognise any one of about 5,000 small pieces

of pipework and then present

each of them on an indexing table ta a robot. The robot correctly orients itself to grasp the item and presents it for several machining

Peter Heywood of BRS emphasised that the robot or

visual system alone could not

be justified; together, they

form a cost effective system with built-in flexibility for

But there is a big difference,

said Heywood, between what

can be done in a laboratory

and its practical realisation on

the shop floor. Robustness is used in removable magnetic the key—of people and systems disc packs. However, it should

ing to employ.

Justified

the future.

back down the line, this robot is able to decorate precisely the tops of chocolates—and get it right every time

over the conveyor. Each

chocolate's image (there are eight types) is digitised and stored so that its location on

the conveyor, its centre of area and the angle of its sides

(if triangular or rectangular)

or its major axis can all be

computed from the stored

The data also defines the type of chocolate (say, a

hazelnut whirl or a walnut

truffle). The correct instructions can therefore be com-

piled rapidly and fed to the robot arm's drives. The arm goes to each chocolate and applies the right pattern pre-cisely.

Ted Johnston, a consultant

in this case the pose, in this identification of large com-

to Haden Drysys, described a system with a similar pur-

ponents' suspended on a

moving overhead conveyor.

A vertical line scan of 128 pixels/line is used in 2

second sweeps across the image area, although the speed can be synchronised to

Equipment has been offered

1.25 Gigabytes (billions of bytes, or words) of data on one This is equivalent to the storage capacity of 50 14-inch, two-sided magnetic disc platters

CONTRACTS AND TENDERS

be borne in mind that the sys-tem is "read-only," in that once the data has been recorded Basically the Drexon process

records data instantly by laser beam melting of microscopically- sized holes (up to five microns across) in an otherwise reflective surface.

The Drexon II process will be used for the new discs, in which the contrast of the holes to the reflective surface has been increased by 50 per cent and

Faster, better defined lip-less allowing coding to be varied by varying the spacing between the holes or by changing the lengths

Drexier has already been offering disc products and these will now be available in Drexon 2, at prices 50 per cent below previous prices in most cases. Typically, the new price for 30 of the 300mm discs will that the price could drop to \$100 when production volumes reach 100,000 discs annually. Recently Drexler announced

plans for a \$7.8m plant for expanded production. A new pilot facility will be established by the end of 1982, with an initial capacity of 1,000 discs a month, expandable uitimately to 10,000 per month as demand grows.

GEOFFREY CHARLISH

Geoffrey Charlish on new moves to sighted robots in the factory

Vision from lab to shop floor

systems, ranging from robots te automatic inspection machines, are to develop in terms of flexibility and versatility, they will have to be able to see what they are

A number of research units in the UK are examining the problem and some of the work was discussed at a Loudon conferen organised by IFS and circled by Professor Bruce Batchelor of the University of Wales Institute of Science and Technology (UWIST).

In an article in Sensor Review not long ago, Professor Batchelor pointed out that although vision systems work in the laboratory, their transposition to the shop floor is another matter. "It often fails to happen," he said, "for reasons totally disconnected with the technical aspects indirect reference to problems of unfamiliarity, conservatism and investment conservatism and labour relations difficulties

Batchelor is trying to ease implementation by making industry more familiar with the possibilities. He has described the design of vision systems as "rather like making a choice from a Chinese menu"—a reference to the availability and suitability of equipment for visual sensing. UWIST has set up a laboratory in Cardiff for project work on a time-charged basis and Professor Batchelor acts as a consultant in conjunction with British Robotic Systems of London

Photocells

At the conference he described some of the prospects for product inspection using for example, processed images from monochrome linescan cameras. These use a line of tiny photocells past which the product is moved, so that a point by point, line by line image is fed into a digital semiconductor store.

Having "captured" image, it can be processed to reveal faults, dimensional errors and other features quite automatically; they can: also be counted.

For example, grey-scale:

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thresholds can be set so that a rather obscure crack in glassware can be "seen" in appropriate illumination and a reject mechanism actuated.

Almost any engineering or natural product can be looked at in this way. UWIST has even been asked to devise a foolproof method of categorising wine bottle corks according to the number and distri-

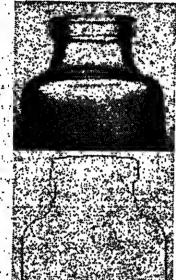
bution of the spots.

By suitable computing, image edges can also be measured for straightness, radius of curvature or tilt from the vertical.

An unusual example of robot vision, developed by Patscentre of Cambridge was provided by A. J. Cronshaw. An (unnamed) confectionery manufacturer had the prob-lem of applying lines, whiris, chevrous and other piped chocolate patterns to the top of chocolates on a conveyor

The supposition, which proved correct, was that a small robot decorating arm could produce a more con-sistent result than a human

A television camera is placed before the robot arm



digitising the image of this bottle and processing it, a precise outline is obtained allowing profile measurements

Construction Ltd.

the conveyor speed. Outline **Surface** checked

laser

Diffracto in Ontario, Canada, is being made available in the UK by Optical and Mechanical Development Company, Edenbridge, Kent (0732 864111).

The surface of parts to be inspected are illuminated by a laser beam and the re-flected illumination received

by a photodiode array. The complex scattering pattern of the light is related to the surface roughness and subsequent electronic processing decodes the surface roughness information, displaying ing the roughness in accepted mits. The electronics can also pass an accept/reject signed, based on a pre-set threshold, to a downstream

sorting gate. Compared with stylus-based equipment, LaserSurf has the advantage that it checks either static or fast moving parts. Furthermore, since it is non-contacting, there is nelther probe wear nor trace

Membrain builds a faster tester

SPEED, CAPACTTY and versatility are the keynotes of a new printed circuit board tester from Membrain, the MB 3332S. The company's previous hybrid tester (that is, a machine able to cope with both computer-like digital circuits and analogue circuits of the kind found in telephony and radio), could affer 1199 digital test points and a further 927 for analogue work. The testing rate

for digital patterns was 500 kHz. In the new machine these three key figures have been raised to 2297, 959 and 2

MHz respectively.

The machine, like its predecessor, is an "in-circuit" tester. Via a "bed of nails" contact platen the interconnections on either assembled or bare boards can be checked, verifying that the correct components have been fitted and properly oriented. Computer diagnosis identifies incorrect components and

Such a test ensures that, if powered up the board will not be damaged. Then, tests with power on can check that each active device functions

ARAB REPUBLIC OF EGYPT GREATER CAIRO WASTEWATER PROJECT

SUPPLY OF MECHANICAL AND ELECTRICAL PLANT AND EQUIPMENT

The Organisation for the Execution of the Greater Cairo Wastewater Project (CWO) invites British manufacturers and suppliers of mechanical and electrical equipment to express interest in tendering for the Greater Cairo Wastewater Project.

CWO is an organisation set up by the Ministry of Housing and Reconstruction of the Arab Republic of Egypt to implement the Greater Cairo Wastewater Project, a major Arab Republic of Egypt to implement the Greater Cairo Wastewater Project, a major scheme for rehabilitating, augmenting and extending Cairo's wastewater system. Design work for the first stage of the project comprising tunnels, major pump stations, culverts and a treatment works all on the east bank of the River Nile and having a total estimated construction cost of about LE 800 million is now under way. Consulting Engineers for this work are AMBRIC; a joint venture between UK firms Binnie & Partners and John Taylor & Sons and US Consultants Camp Dresser & McKee and Black & Veatch International (in association with Egyptian Consultants, Egycon). Foreign currency requirements for the first stage east bank work will be met from a 500 million grant from the British Greenment and a 5100 million loss from the Widland Bank and Samuel Montagu British Government and a £100 million loan from the Midland Bank and Samuel Montagu

& Co. Ltd., backed by ECGD. It is envisaged that tenders will be invited later in the year for the manufacture, works testing, delivery, erection and commissioning, including training of operatives, of the undermentioned Items of mechanical and electrical equipment for sewage applications. All associated motors, switchgear, cubicle starters, cabling and control gear will be included as appropriate with each Item.

Item No. 1 — Rotodynamic Pumps in two Stations:

Dry chamber unchokable sewage pumping equipment, pipework, valves, penstocks, stairways, platforms, etc.

14 No - Units of capacities up to 3500 1/s each. Item No. 2 - Archimedean Screw Pumps in eight Stations: Pumps, gearboxes, penstocks, etc. 70 No — Units of capacities up to 2350 1/s each.

Item No. 3 - Positive Displacement Pumps in three Stations: Reciprocating pumps, gearboxes, pipework, valves, platforms, etc.
30 No — Units of capacities up to 160 l/s each.

Items 4 to 11 below are required for a wastewater treatment plant of capacity 1,000,000 and (maximum throughput 1 700 000 and)

emd (maximum throughput 1,700,000 cmd). Item No. 4 - WWTP Inlet-Works Machinery Installation: Screens, detritors and all ancillary equipment.

24 No — Screen Units to pass average flow of 1.16m'/s each,

8 No — Grit collector units.

Item No. 5 — Primary Sedimentation Installation:

Circular tank centre feed equipment and all ancillaries.

32 No. Item No. 6 - Secondary Treatment Installation:

Fixed surface agraints with draught-tubes, gearboxes, etc. 160 No — Units of 75 kW capacity each. Final Settlement Installation: Circular tank centre feed equipment and all ancillaries.

Item No. 8 - Chlorination Installation: Metering pumps, pipework, injection equipment, etc. 2 No — Sets of equipment each of 22,500 kg/d capacity. Item No. 9 - Sludge Thickening Installation:

Circular tank centre feed equipment and all ancillaries. 24 No - Units to pass average flow of 3300 cmd each. Item No. 16 - WWTP Electrical Power Distribution Installation: HV switchgear, transformers, LV switchgear, standby generator, cabling, etc., for total installed capacity of 20 MW. 4 No - 4 MW sub-station installation each.

Itam No. 11 - Instrumentation and Control Installation: Centralised monitoring equipment for process and plant. Interested suppliers or manufacturers or groups of suppliers or manufacturers are invited to express interest and to provide the following detailed information:

2 No - 2 MW sub-station installation each.

(a) Item(s) for which they wish to tender;
(b) capability to supply the plant and equipment indicated;
(c) previous contracts of similar nature and size undertaken by the company or group

(d) the financial standing of company or group of companies. Details should be submitted not later than 30th April 1982 in:

AMBRIC. P.O. Box 2265 Ataba Square Cairo, ARE....

Taylor Binage & Pariners Floor 2, Greycost House 10 Greycoat Place London SWIP ISB

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The Mogembo Irrigation Project will develop Irrigated agriculture over a nat area of about 2200 he using water abstracted from the Juba River and lorms pert of a proposed ultimate development of some 6000 he. The construction of most of the works will be the subject of international competitive tendering under the terms of agreements for financial and negotiated between the Somali Competitive Republic, the Kuwait Fund for Arab Economic Development and the Kreditanstalt fur Wiederaufbac. Suidings and Services especiated with the Project are to be the subject of an advance Contract to be advanted in Somalia ehority.

or an eavence contract to be advantaged in Somelia shortly.

The tender documents are in the course of preparation for this contract, which will be let to a prequelified tenderer with a view to construction commencing early in 1983. The Works generally comprise:

(a) Supply canel and distributory canel system to supply the irrigated

ereas.
(b) Pump station at the head of the supply canal. (c) Consi structures includin gayphone under the Gelib/Kismaye road and the flood relief channel, cross reguletors, distributory eutlets, escapes and other canel structures.
 (d) infield works comprising water courses and esseciated structures, lond forming, surface drains, and eurlege drain culvarts.

(e) Drainage channel system comprising autiell drain and main collector drains.

(1) Oralinage pump station.
 (2) Orein structures including road culverts, collector drain junctions and all other drain structures.
 (h) Sprinkler pump station together with distribution system.

Flood protection bunds and remodelling of existing flood relief The sapply and appervision of eraction of the pumping plant and gates and other water central equipment will be the subject of nomineted

PREGUALIFICATION OF TENDERERS Contractors who wish to be prequalified for the above Contract should aubmit their names and addresses to be raceived by the Consultant before 1st May 1982. They will be sent further information about the Contract and requests for the information needed in the prequalification procedure.

The Consultant, to whom applications for prequelification and registration should be sent, is:

SIR M. MACDONALD & PARTNERS
OEMETER HOUSE
STATION ROAD
CAMBRIDGE
C81 2RS
UNITED KINGOOM

who will acknowledge all applications and, in due course, supply, further particulars. LANGUAGE

plone of original documents, or copies thereof, which are not in should be accompanied by English translation. Signed: THE GENERAL MANAGER MOGAMSO IRRIGATION PROJECT PO BOX 1025 MOGADISHU SOMALI DEMOCRATIC REPUBLIC

INTERBASE E.P.

An Enterprise of the ownership of the Republic of Cape Verde, has received loans from the following sources:

- SAUDI FUND FOR DEVELOPMENT - ARAB BANK FOR ECONOMIC DEVELOPMENT IN AFRICA

Such loans are for development towards the cost of a fishing project, and it is intended that proceeds of these loans will be applied to payment under contract for which this invitation

for prequalification is issued. The tender for which proqualification is now loid open comprises the supplying of:

- 12 STEEL HULL TUNA BOATS, 14-18 METRES LONG, WITH 220 HP ENGINE, EQUIPPED WITH GEARS FOR POLE AND

LINE FISHING, AND BAIT CATCHING AS WELL

Candidates most send applications for prequalifications to INTERBASE E.P. P.O. BOX 59 MINDELO

REPUBLIC OF CAPE VERDE (TELEX NR 993-84 INTERB SY CY)

Within 30 days after this invitation is made public, applications must be presented and completed with good documents to corroborate (documents must be sent in duplicate):

(1) Candidate's experience and past performance. (2) His capabilities with respect to personnel, equipment and

(3) His financial position.

PERA MIT TRAINING

1. 1

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 ${}^{\mathrm{tot}}W_{4}$

0.56%

*** 1 103 50.77

337 37.00%

FT Monthly Survey of Business Opinion

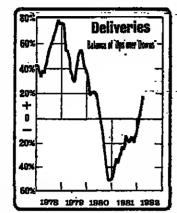
GENERAL OUTLOOK

Outlook more optimistic

general business siluation showed a significant improvement in March, and a higher balance of those surveyed were optimistic about the future than at any time since the start of the recession.

The three sectors surveyed during the month—construction and building, food and tobacco, and textiles and clothing-were all more optimistic than when the companies were last interviewed in November. The moderately improved prospects for growth and for lower ioterest raies were among general factors cited.

Most of the companies were interviewed before the Budget. but io follow-up interviews, they expressed generally favourable



weather during the winter mooths was a dampening effect on the optimism of some companies, and in the construction industry, the continued restraint an government spending and the low level of housing starts was to be seen as a restraining factor. general

optimism shown by the survey fell back during the summer and autumn of last year after a steady improvement from a very low level in the depths of the recession io the summer of 1980. Since last autumn, bowover, there has been a sustained improvement with a balance of 30 per cent of respondents saying they were more optimistir but unexcited reactions to the than they were four months

C Statistical Material Copyright Taylor Nelson Group Ltd.

Are you more or less optimistle about your company's prospects than you were four months ago !	Dec- Mar. %		Oct.	Sept-	Costreto.		Textiles & Clothing
More optimistic	50	46	- 34	30	76	47 .	<u></u>
Neutral	30	32	44	48	24	44	23
Less optimistic	20	22	22	22	0	,	0

EXPORT PROSPECTS (Weighted by exports)

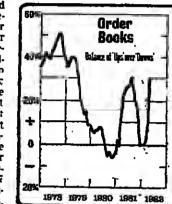
GENERAL BUSINESS SITUATION

Ē	Over the next 12 months exports will be:	Dec- Mar. X	Nov Feb.	Moving to Oct Jan. V	Sept	Costreto.		Textiles & Clothing %
ř	Higher	83			- 63	50.	- 21	100
-	Same	- 8	11	14	24	37	35	0
	Lower	8	12	11	12	14	12	0
•	No answer	1	0	2	2	0	12	0

ORDERS AND OUTPUT

Signs of improvement

THE THREE sectors surveyed this month indicate an improvebooks compared with four months ago. The severely depressed construction and building sector has finally started to expect an improvement in the level of househulding, the number of housing starts in 1981 having plummeted in the lowest level since the war. Last November name of the companies interviewed in all three sectors expected their order books to improve in the following four months. This time 17 companies were expecting expansion in their order books, resulting in the greatest improvement in this index since



Nearly three times as many companies expected their turnover to rise by 2.5 per cent or more in the next 12 months as had given this answer in November, Again, the hillding and construction industry is more oplimistic because of signs that housebuilding is on the way up again. Some of the companies were re-interviewed after the Budget and publica-tion of the Public Expenditure White Paper. A quarter of them increased their expectations of increased turnover. The optimism was hetped by a general feeling that interest rates would fail further in the

NEW ORDERS

The trend of new orders in the last four months was!	Dec- Mar. %	Nov Feb. %	moving to Oct Jan. %	Sept-	Castreta.	March 198 Food & Tobacco %	72 Textiles & Clothing
Up	38	33	26	16	31	14	26
Same	30	30	37	38	40	44	35
Down	78	17	20	27	29	<u> </u>	23
No answor	14	20	17	79 ·	0	20	16

PRODUCTION/SALES TURNOVER

	. 4 1	nonthly	moving t	March 1982			
Those expecting production/sales turn- over in the next 12 months:	Dec- Mar. %	Nov Feb.	Jan.	Sept Dec. %	Costreta. & Bldg. %	Food & Tobacco %	Textiles & Clothing
Rise over 20%	3	3	7	1	3	. 0	0
Rise 15-19%	1	3	2	2	0	0	0
Rise 10-14%	10	7	8	5	37	0	0
Rise 5-9%	22	. 21	20	20	24	25	49
Rise 2.5-4%	25	23	20	18	3	50	47
Remain the same	31	37	40	44	3	24	3
Fall 2.5-4%	6	5	5	8	. 22	0	0
Falt 5-9%	0	2	. 2	2	0	0	0
Fail 15% or more	1	0	0	0	7	0	0
Median	3.7	3.2	2.8	2.0	8.1	3.8	5.0

CAPACITY AND STOCKS

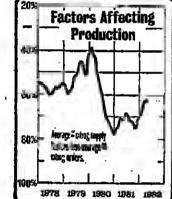
Output level improves

the percentage of rompanies working at planned output levels or above continued to improve last month, reflecting industry's general improvement

in confidence.

Both the bullding and construction and the food and tobacco seriors reported mare favourable rapacity working than when last surveyed in November. Another sign of confidence rame from the improvement in the number of companies saying thry rould plan more than six nighths ahrad with rrasonable accuracy.

Respondents' answers to ques tions about slorks was mixed.



The textiles and clothing sectors expected stocks of all kind to increase, while the building and roostruction industry ex pected these in fall. There wa therefore little change in the irdices governing the volume of work in progress or stork raw materials and compo rearis. However, the fond sec-'' ''' '' 'lis index

or minching not being used.

STOCKS

ec- ds	Raw materials and components over the next 12 months will: Increase Remain the same Decrease No answer	4 m Dec Mar. % 25 52 22 22	Nov Feb. 26 53 19	Moving Solution Solut		Costreto.		82 Textiles & Clothing 81 3 16 0
X- as	Manufactured goods over the next 12 months will:							
e e	Increase	24	18	18	14	24	25	55
	Remain the same	43	48	44	. 50	44	62	55 22
ne ks	Decrease	21	18	21	21	25	13	16
lO-	No answer	1	3	- 5	· 4	. 0	. 0	. 0
C-	Not applicable	12,	_ 13 _	12	10	. 7	0	. 7

FACTORS CURRENTLY AFFECTING PRODUCTION

	7 11	HOANG F	LJ4LCU 1204				
Are any of the following factors limiting your output at present i	Dec- Mar. %	Nov. Feb.	Oct Jan. %_	Sept- Dec.	Costreto. & Bldg. %		Textiles & Clothing %
Home orders	. 87	86	89	92	93 .	87	89
Export orders	49	50	55	55	53	45	58
Executive staff	1	2	2_	1_	0	0	-0
Skilled factory staff	6	3		4	15	-6	11
Components	2	2	3_	1-	1 .	0	0
Raw materials	4	0	0	ī	.12 .	13	0
Production capacity (plant)	6	7	4	. 3	0	6.	26
Finance	1 .	1	0		0	-0	-
Labour disputes	6	4	2	2	0 ·	13	0
Others	· 21	21	21	20	15	9	o_
No factors	4	8	8	5	1	0	

INVESTMENT AND LABOUR

Some increased investment seen

creased tendency among those surveyed to say that they would be increasing capital expendi-ture. All three of the seriors interviewed in March were less inclined to say that they ex-pected the proportion of capital expenditure spent overscas to increase, or they were more inclined to say it would decrease. This indicator has therefore

fation quite sharply.
A general tendency to say that capital expenditure would increase has been evident from about the jurn of the year. This reflects the pattern of general business optimism shown by the

There was a continued in-



panies to say they expected in take on more labour, particularly in the construction sector. However, same construction companies said uncertainty about whether the recession had really come to an end was discouraging them from taking on extra workers.

The reduction of the employers' National Insurance Sur-charge in the Budget does not appear to have given companies a great incentive to take on extra labour. There is still a batance of 25 per cent of com panies saying they expect to reduce labour requirements, but this negative balance has been declining since last autumn.

LABOUR REQUIREMENTS (Weighted by employment)

·	4 m	noving t	March 1982				
Those expecting their labour force over the next 12 months to:	Dec- Mar. %	Nov Feb.	Oct Jan. %	Sept- Doc. %	Cnstretn. & Bldg.	Food & Tobacco	Textiles & Clothing
Increase	17	13	12	8	26	3	45
Stay about the same	42	45	44	. 47	50	49	0
Decrease	41	. 42	43	45	24 .	47	55

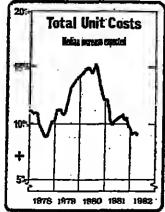
CAPITAL INVESTMENT (Weighted by capital expenditure)

Г-	•	4 n		moving t	March 1982			
t S	Those expecting capital expenditure over the next 12 months to:	Dec Mar. %	Nov Feb. %	Jen.	Sept Dec. %	Enstreta. & Bidg. %	Food & Tobacco %	Textites & Clothing
a	increase in volume	41	34	25	23	56	36	64
l-	increase in value but not in volume	9	77	9	12	3	12	0
t	Stay about the same	20	23	20	22	73	41	20
n	Decrease	29	31	42	40	28	72	75
	No answer	1	. 2	· 3	3	0	0	-0

COSTS AND PROFIT MARGINS

Mixed pattern in wage demands

sectors are expecting greater expectations. thrreases in wages than they had done in November but food iocreases in excess of the four-mooth moving totals cover-and tobacco companies re- amount budected remains quite ing some 120 companies in duced their wage increase



expectations. This pattern was reflected in the views about unit costs, with the building rompantes are covered in turn surveyed every second month), and construction sector expect- every mooth. They are drawn Complete tables can be ing a sharp rise in the next 12 from a sample based on the FT purchased from Taylor Nelson months but the food and Actuaries Index, which and Associates.

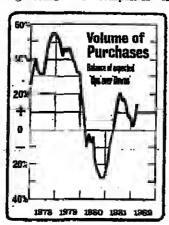
Delermination to resist wage strong although there is greater willingness to negotiate a shorter working week, More companies would like to pay increased differentials to

groups of employees although the majority think they have already established or re-established sultable differentials. Although more companies expected their profit margins

to rise over the next 12 months than had done io November this was not reflected in the indicies weighted by market eapitalisation. These surveys, which are

carried out for the Financial Times by the Taylor Nelson Group, are based on interview with senior executives.

THE BUILDING and textile tobacco group giving reduced accounts for about 60 per ceot of all public companies. The atl-industry figures are



the 11 industrial sectors of Three sertors and some 30 [mechanical engineering is

COSTS

	- 4 n	menthly r	noving t	otal ·		darch 198	27
Wages rise by:	Dec Mar. %	Nov Feb. %	Oct. Jan. %		Costreto.	Food &	
0-4%	2	2	2	4	7	3	0
5-9%	86	80	80	75	56	. 96	100
10-14%	12	15	14	13	36	<u></u>	
Remain the same	0	0	0	2	0	0	0
No answer	1	2	4	• 7	0	. 0	0
Unit costs rise by:	%	%	%	%	%	%	%
04%	6	2	2	3	0	28	15
5-9%	39	40	40	39	25	52	38
10-14%	35	36	32	36	52	1	32
15-19%	0	0	4	4	-		0
Remain the same	2	3	4	- 3	0	0	16
Decrease	2	2	2	2	0	- 0	0
No answer	16	17	17	14	72	19	0

PROFIT MARGINS

	4 m	onthly r	March 1982				
Those expecting profit margins over the next 12 months to:	Dec. Mar. %	Nov Feb. %	Oct. Jan. %	5ept Dec. %	Costreto.	Food &	Textiles &
Improve	47	46	42	. 49	56	59	84
Remain the same	38	42	47	43	15	34	16
Contract	14	12	11	8	15	6	
No answer	2	Δ.	- 0		15	- 0	

Underwriters petition over divestment plan

BY JOHN MOORE, CITY CORRESPONDENT

at Lloyd's have joined forces writing interest elsewhere. with a group of Lloyd's insurance brokers in an effort to prevent a key clause in the Lloyd's Bill from reaching the underwriting agents would not statute books.

The five underwriting agents

—Andrew Drysdale Underwriting, Cassidy Davis, Holmes
Hayday (Underwriting,
Agencies), R. J. Kiln and Co,
Roberts and Hiscox, together with Mr Ralph Rokeby-Johnson. an underwriter and director of R. W. Sturge, another under-writing agent—have lodged a parliamentary petition with the House of Lords. This will be beard, together with five other petitions, by a select committee

Their petition seeks to stop a clause in the legislation, planned to improve the insur-ance market's self-regulation, which will force Lloyd's insurance brokers to sell off their shareholding links with manag-ing agency groups at Lloyd's, the companies which run underwriting syndicates. Parliament forced the measure on Lloyd's after identifying conflicts of interest in the relationship which had led to actual abuse.

The move by the underwriting agents adds a new dimension to the debate, as well as new arguments against the divest-ment proposals. In the past most critics of the divestment proposals have been the brokers, who will be most directly affected in terms of lost revenues and profits to their activities if they are forced to sell their shareholding links.

Damaged

The underwriting agents, who in their petition say that they are not controlled by any Lluyd's broker of group comprising a Lloyd's broker, argue that "their property and their interests are injuriously affected by the Bill." As underwriters in the non-

marine market. Lloyd's largest premlum earner, they rlaim that this market will be damaged by the commercial consequences of divestment.

Since Lloyd's does not deal directly with the public, it depends on its business volumes from the brokers, they stress. The relationship of broker and underwriter "is and has been close and complementary." Divestment would impair the relationship and would place Lloyd's underwriters at a disrdvantage. "It is often more expensive for brokers to place insurance at Lloyd's than with insurance companies," says the petition.

If divestment went shead they would no longer have as great ao interest in fostering the growth of underwriting at Lloyd's, as they would remain

FIVE UNDERWRITING agents free to develop their own under-While the brokers would be

able to develop non-Lloyd's inhouse underwriting operations, under the proposed legislation be able to own or have any interest in a Lloyd's broker. Mr Andrew Drysdale, one of the petitioners, ferls that this is

wrong. He questions whether Sir Henry Fisher, who studied self-regulation at Lloyd's and recommended divestment, bad coosidered the wider implications. "Did he really conceive that by making it illegal for the underwriter to own the broker, that by doing so he was putting the underwriter wholly in the hands of the broker?" he asks.

Balancing

If potential members of Lloyd's know that the underwriters cannot stand up to the brokers because the brokers have a monopoly of the production of business to Lloyd's they might not be so willing to come forward, he suggests.

Divestment will only give more power to the brokers, and prevent the underwriters from balancing that power. The underwriting agents argue that if they have no facility through shareholding links to market their own new products they will be in a much weaker posi-tion than before. Brokers will give first priority to the insur-ance rompany market, it is suggested.

" If the broker won't show the underwriter the business, the underwriter should, as a last resort, be able to go out and get the business for bimself." says Mr Drysdale.

Another argument against divestment in its present form was launched in the House of Lords last week during the second reading debate on the Bill, Lord Strathalmond, who works for an underwriting agency at Lloyd's, said that the divestment clauses, in their present form, did not go far enough.

The divestment clauses, as they stood, did not prevent a broker owning a members' agency, the grouns which introduce new members to Lloyd's. "It appears to me that if a broker, by owning a managing agent, creates a potential conflict of interest, that same conflict is also there if be owns a members' agent. Both agents represent and act for the underwriter and underwriting members who are commercially

opposed to the broker."

Since he had oot identified major conflicts of interest between a broker and ageot which could not be satisfactorily resolved without the belp of leg-islation he questioned whether the divestment clauses were necessary "especially as they deal only with one of the two types of underwriting agent."

WEEK'S FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The board meetings are mainly for the purpose of considering dividends and official Indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

Provident Financial Grp. The Mortolk Gardens Hotel: Hall Ings. Scatters. West Yorkshire. 12.00.
Str. 50 1st. 122. Leadenhall Street. EC. Whitelepham (Wilsen) Gregs.). The Motropole Hotel. Notional Exhibition Cantre. Berningham. 12.00
A. 0 MEE: IHCAS—
MASSIG. Front. Publishers. COMPANY MEETINGS-Al Ind. Prods. Federation House, Station Road Stoke-on-Trent, 10.30 Brogdstone Inv. Tat., 120. Chespside: EC. 50
tson (J. & H. B.1 The Leofric Hotel.
ventry. 5.00
delle Universal. The Great Eastern
stell. Liverpool Street EC. 11.30
allan Glenlivet. Macallan Glenlivet
stillery. Craloellechie. Saniishire. Jackson C. 6 M. B. 1 The Leotric Hotel.
Coventy. 5.00
Lonadia Universal. The Great Eastern
Lonadia Universal The Coventy.
Macallan Glenlivet
Macallan Glenlivet
Olstillery. Craloellechie. 8-niishire.
12.00
Miniray Western Inv. 7st., 183, Hope.
5frees. Gresgow. 11.00
Vorkgreen Invs., The Stock Exchange. EC.
4.00 Finals: Assnc Book Publishers Beniord Concrete Machiners Espander Metal Estandil and Harvey Bill and Ouffut 4.00
USARO MEETINGS—
Finals:
British Printing and Commun
Erith
Gordon iLnist
Hnntley and Palmer
Jerome (5.1 meclaritane (Ciansman) Rurpby Portland Comment Wills (George) Interima:

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Lin. Signt
reni-Roadstone Hidgs. Tpc Pt. (A) spc al American Sank for Economic gration Fitg. Rate Ser, Notes 1994 American Bank for Economic Interaction First Rate Ser. Notes 1924 5357.400 First Rate Ser. Notes 1924 5357.400 First Rate Prop. Int. Tst. Db. S. Inc. Cons. 2:ppc 14pc Edinburgh Inv. Tst. Ob. 2:ppc Ewner New Morthern 1p 7:ppc 1971.100 First Rate Prop. 1

London County & Middiand Tat. Ob. 5 Lpc
Londola Universal 0.55
M. & G. Australasian & General Fund
Inc. 0.55
M. & G. Australasian & General Fund
Inc. 0.55
Metropolitan Water Bd. West Middlesse
WW 35c Db. 11pc
Middiand Bank 16p
Middiand Bank 15.5750
Stocklaks Middiand
Middiand Bank 15.5750
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Olvioletto & Interest Payments
Ansch Chonen Steel Highs. 1.87e
Sampton Prop. Grp. Lr. 1-28e
Sampton Prop. Grp. Lr. 1-28e
Sampton Prop. Grp. Lr. 1-28e
Sampton Aritist Assets
Sampton Prop. Grp. Lr. 1-28e
Sampton Prop. Lr. 1-28e
Sampton Prop. Grp. Lr. 1-28e
Sampton Prop. Lr. 1-2

Greenell Whitey Lna. 51, 4,0625 pc
Henlys 50
Kellock Tst. 0.1870
Miscallan Glenilyet 4,70119
Macarithy Phermacouticals Zp
McMellen 4,725 pc Ft. 2,562306
Oo. 101; P. 5.250
Oo. 101; P. 5.250
Oo. 101; P. 5.250
Co. Ln. 349c
Prestice Grp. 4,375 p
Saltchia Santchi 1,369
Scottish & Newrastia Bremeries 1.58
Scottish & Newrastia Bremeries 1.58
Southwark 11 Lpc Red. 84-85 Sape
Heldusion 0,740
Utd. Scientific Hidds. 3.59
Winchester Street EC. 2,45
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Winchester Street EC. 2,55
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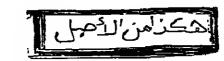
Ward White
Interims:
Photo-Ma Intmi
Serving Cities Inv
OIVIGENO & INTEREST PAYMENTS—
Advanced Bros. 0.50
Anticipal Merigana Variable 849.
110.52 8.00 Merigana Variable 849.
110.50 Merigana Clays 4.50
110.50 Merigana M. Hidos. 2p Press. Tols. 0.8p Rensom (Wm.) 1.5p Stonehill Hidgs. 2p Trusthonse Forte. 4.50 West Coast & Taxas Regional Int. 7st. Nest Coast & Taxas Regional IV.

J.Sp Hampshire Water 16 5pc Man. (mlv. D) 2.5pc (mlv. 5pc: 1.7 5pc

COMPANY MEETINGS—

COMPANY MEETINGS—

COMPANY MEETINGS— Bridge, Edinburgh, 12.00
Anglo-Imt. Inv. Tst., 20. Cnnnon Street.
EC. 12.00
Ledies Fride Outerwear. Allen House.
Newarks Street. Lekester. 17,45
Et. Andrew Tst., 20. Charlotte Souars.
Edinburgh, 12,30
Westwood Dawes, Pedmore House Ham
Lane, Pedmore. Stourbridge, 12,30
BOARO MEETIHGS—
Finels:
Armitage Bros
Aurors
Coates Bros
Mighlineds and Lowlands
Rock Durcham
Interiess.
Hew Cantral Witwatersrand NOCK DUMBAM
Herterical Witwatersand
Writer Thomas
Writer Thomas
I've 15
OVIOCHO & INTEREST PAYMENTS—
Andio-Inc. Inc. 15: 3.20
Ashlay Ind. 15: 1.50
Assoc. Fisheries 1.75p
Banks riddrey C. 2.25p
Banks riddrey 2.45pc
City of Abenteen Land Assec. 4.25p
City of Mees 2p
Courts (Furnishers) 1.75p
Osle Electric Int 0.70
Denmark (Kungdom of) 312pc 20-yr. Ext.
Lii. 1984 2.2pc
Outolas (Robert M.) Hidge. 0.75p
Gillett Sres. Olscount 1.75p
Impala Plashum Hidge. 13.37823p
Jackson (1, & H. 8.) 0.85p
Johnson Grp. Cleaners 5.55s
Ladies Pride Outerwar 20
Liberty Life Assoc. of Arries 84cts
Medgininster 1.50 Agency Life Association of the Commission of the McMail Bulletto 3.3P
Mid Wyng Int, Inw, Tat. 0.3P
Murray Glenderon Inv. Tat. 0.3P
Paradise (E.) 0.7P
Postund Inv. Tat. 4.85P
Pinasurama 7P
5128 GFP. 1.5P
Sundevalishances Fity. Rate Cap. /
1935 845.54
Tribume Pw. Tat. 2.2P
17. of Fron. 5tures 0.25p
Zatters Grp. 0.36p
Paribay. April. 5 GOARD MEETING-ODARO MEETING— AFRIL 5
Interim:
Interim:
Interim:
OIVIOENO & INTEREST PAYMENTS—
Crowning-Farris Inds. Inc. 0.25cts
Canal-Randolph Corp. 18cts
Crav Electronics 0.725c
English Assoc. Grs. 10
Jones Stroud Hidgs. 20
Victor Froducts Wallegnell 1.58
Wholeste Filtings 1.21c
SATURDAY. ABRIL 10
OIVIOENO & INTEREST PAYMENTS—
1-affortings Hidden 0.7p
M. A. G. Far Eastern & General Prind Inc.
0.435p



FINANCIAL TIMES SURVEY

Monday April 5 1982

Electronic Components

The electronic components industry is performing well despite the recession. The U.S. domination of the industry has been seriously challenged by Japan while West European countries still lag behind. Developments in technology show no signs of slowing down during the next few years

Horizons widen for new markets

By ELAINE WILLIAMS

sion, the electronics industry is estimated to be growing at a growth is still impressive. It rate of more than 20 per cent has managed to maintain a growth rate of about 11 per cent a year in the 1980s at a time when other industries have declined sharply.

It continues to make strides in technology—some of which will be shown at the All Elec-tronics Show at the Barbican later this month—and many new markets are: opening in areas such as telecommunica-tions. Industry and commerce have realised that electronics tronic ones. equipment is vital to maintain a competitive edge or simply to survive the cold wind of the

The computer industry still represents the largest customer for the electronic components industry taking about 25 per cent of the total production of integrated circuits

Within this sector the fastest growing segment is small computers which find applications as personal business machines or are integrated as part of other industrial or commercial systems. These small desk-top tion systems are vital to insized computers are linked to crease productivity and lower the growing interest in office automation which is mainly in Europe industrial appli-centred around word process cations for electronics repre-

AGAINST the tration of word processing a year reaching a value for

Western world word processing equipment of \$5.330n by 1985. Coupled with the evolution in the office is the increased demand for telecommunications, resulting in another growth sector for electronic components. The western world is now going through a transition from outdated electromechanical telephone systems to completely elec-

More components

This is also opening up new markets in data communications equipment, connections to computer systems and new telephone gadgets, all of which need components.

industry, demand for applying electronics to automatic industrial processes is increasing. Companies have realised that robots and other automated produc-

The market for consumer photographic process. sumer goods such as calculatora and digital watches seem to be are implanted with impurities levelling off in sales although to give the circuits the required video games and home video electrical characterisics.

The introduction of the first microprocessor — a computer on a chip — in the early 1970s marked a new phase in both electronics and computing. It lowered the cost of computing to a level where it could be employed in almost any applica-

Hence its appearance in equipment as diverse as electronic games, aircraft navi-gation systems, aids for the disabled, heart pacemakers and industrial controls.

. Technical developments over the next few years-will continue to centre on squeezing more individual components on to the tiny square of Silicon probably going beyond im elements per

Microprocessors will become more complex and be able to store more data on the same separate memory making it truly a complete computer on a silicon chip. Today the largest semiconductor large amounts of information —are capable of holding 64.00 bits of information. Semicor ductor companies are now se to leap to memories capable amount of information.
Designers are already reach

electronics is not growing as Integrated circuits are built fast as some other sectors up in layers on the silicon base. Integrated circuits are built se of the recession. Con- Parts of the silicon is etched goods such as calculatora away by acids while other areas

Optical methods

above the previous one using has risen from 10 per cent to optical methods. However, if more than 15 per cent which, to become more is higher than in any other Today each layer is aligned complex the size of each individual transistor or element has to shrink helow the size at which the optical methods are So companies are

Although the market for electronic components is growing at a healthy rate, it costs a lot of money to keep in the semi-conductor race. Technological developments are moving ahead

at an annual rate of about 12 which is based on photolitho- re-equip constantly with the per cent graphy—a highly sophisticated latest design and production equipment.

The complexity of modern silicon chips means that it is impossible to design them without the aid of sophisticated computers and a factor limiting the expansion of production facilities has often been the delay in deliveries of the latest machinery to make the circuits.

The ratio of investment to total turnover in the industry industrial sector.

If we consider Inmos. for example, the UK semiconductor company set up under the former. National. Enterprise cessors and other circuits and still needs more money if it is to keep abreast of develop-

It has been estimated that so fast that companies need to pamies in this field spent about

LEADING MANUFACTURERS OF SEMICONDUCTORS

(1980 shipment estimates)

West European		U.S. (\$m)		Japanese	
Philips†	558	Texas Instrts.	1,580	NEC	769
Siemenst	420	Motorola	1,100	Hitachi	· 658
AEG-Telefkn.	196	National Semi	770	Toshiba	629
Thomson-CSF	190	Intel	575	Fajitsa	419
SGS-Ates	150	Fairchild	566	Matsushita	300
Plessey	49	Signetics	384	Mitsubiski.	254
Ferranti	48	Mostek :	330	Sanyo	180
t Excluding U.	S. snb	sidiaries. S	ource:	Dataquest, July	1981

ment which was 40 per cent more than the previous years. Industry observers feel that such costs coupled with intense competition in

market will encourage an acceleration of mergers and takeovers which has been a feature of the industry over the past five years or so. This, observers say, will lead

to the emergence of a dozen or so electronics giants — rather like the seven major oil companies - which could control as much as 60 per cent of the worldwide electronics market.

For some years now a number of industrial groups have shown the potential to be classed as prototypea of these giants. Apart from IBM, which has already achieved such status, AT & T in the U.S., Philips and Siemeus in Europe, Toshiba, NEC and Hitachi in Japan have the structural characteriatics which could one day set them on this level.

However many multinationals such as oil giant Exxon, Honey-well, and United Technologies are among companies which have taken over electronics concerns because of the industry's growing importance.

the need to influence the direction of national electronics Several Western mounted programmes aimed at closing the technology gap with the U.S. and Japan.

Initiatives include plans in Cermany to support semiconductor research and development providing grants of DM 143m (£33,26m) from 1978 to 1981. The German Government is now considering a further injection

In France efforts have been Joint venturea with panies such as Motorola and Harris and National Semiencouraged.

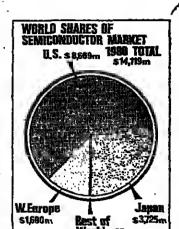
In the UK more than £120m has been dedicated to industry support programmes setting up the Inmos venture. According to the Electronic tion there is also state support for specific components such as sation of industry sectors such as resistors to increase compe

titiveness But both the U.S. and Japan, which emerged from a four-year catching up exercise in 1980, are now poised to take a further technological leap. U.S. companies have found a measure of support for developments, under the U.S. defence spending budget through the very high speed integrated circuits programme.

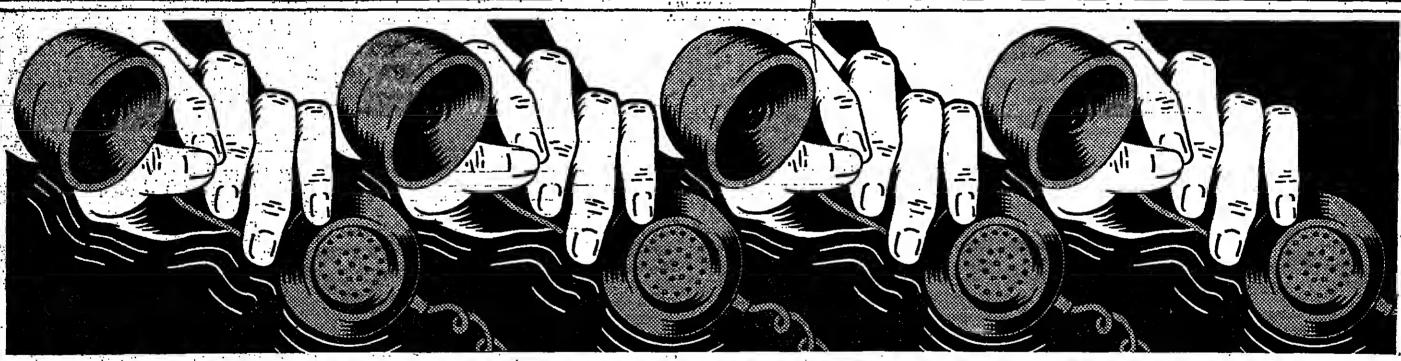
MITI guidance

Meanwhile, Japan's private companies are being guided by the Ministry of International Trade and Industry (MITI), to Even Third World countries such as Taiwan, Singapore and Hong Kong, which concentrate consumer products, are looking to improve their tech-

nology base. Taiwan and Korea were attractive as offshore assem'/ly locations for integrated cir cuit manufacturers because of cheap labour.



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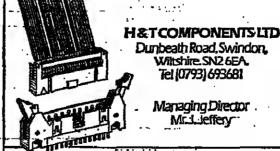
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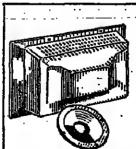


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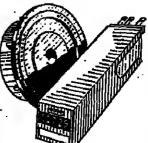
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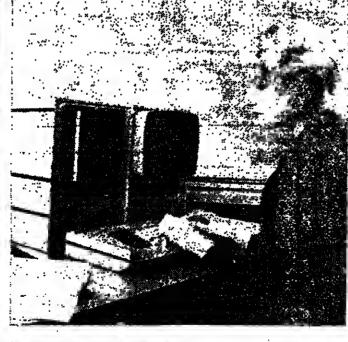
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Trade flows become a political issue

THE "JAPANESE threat" to U.S. dominance of the world market for electronic components is no longer simply an industry issue. As the magnitude of the problem has emerged, concern has spread into the political arena to be studied by the Department of Commerce and possibly to be acted upon directly by the President as a matter of national security.

Can the Japanese repeat their successes in the automotive, steel, textile and consumer electronics markets to take over much of the world market for semiconductor devices? Many in the U.S. believe that they can, and will, unless something is done to stop them.

U.S. imports of Japanese nemory chips, have become an important factor in U.S.-Japanese trade negotiations. The U.S. industry wants "reciprocity"; that is, they want the Japanese to allow free access to their domestic market.

Currently, trade barriers, both official and informal, pre-veot U.S. firms from establish-ing themselves in the Japanese market-place, according to a study sponsored by the Joint Economic Committee of Con-

While the majority view of the U.S. industry, as represented by the semiconductor industry association, strongly. favours open trade between the U.S. and Japan, there is some pressure for protectionist measures in the U.S., should trade negotiations fail to produce compromise on the part of the Japanese.

Motorola, one of the largest U.S. semiconductor producers. recently called upon the Department of Commerce to make an "informal" study of Japanese pricing policies in the 64K Ram (Random Access Memory) market, with a view to possible anti-dumping action against Japanese producers of the memory chips.

Others are bopeful that the President may act under a little known national security provision of the trade code to limit imports of 64K Rams as a strategic product.

U.S. chip makers are in a fighting mood. The combinaof general economic pressures and increasing Japanese competition in the semi-conductor memory market sharply reduced the 1981 profitability of every major U.S. chip manufacturer. Throughout this recession, however, U.S. semiconductor manufacturers bave steadfastly maintained high capital spending.

A previous business down-turn in 1974-5 taught them a hard lesson. In that recession, U.S. firms stopped expanding their production capabilities. When the market turned up, the U.S. companies were not able to keep up with demand, and Japanese competitors stepped in to fill the gap in supply and demand. Japanese suppliers established a foothold in the U.S. and European markets that they bave never relinquished.

tic terms—is a synonym for subeditors. These are the people who translate the incomprehen-

sible language of the writers into a language suitable for

via telephooe earpieces or loudspeakers to sensors to

measure temperature, pressure, failure in moving machinery, cracks in walls, fire detection,

and such things.

It is a large, growing and, at present, a rather expensive industry—at least if you need

transducers. But as the revolu-

It is, however, a fragmented iodustry with many small com-panies in the field and the

larger companies producing transducers for their own use.

The entire Western world is committed to transducers—the UK is not lagging and is producing some of the best technology in the field.

Anomy of Cheltenham NO.

Ancom of Cheltenham provides a selection of specialist temperature and hamidity orientated products and is

temperature measurement and

announced a complete raoge of Three sizes are available.

prices should fall.

sh consumption. In electronic terms the trans-ducer cooverts electrical signals duction facilities.

For many years, U.S. semiconductor chip makers competed with Japanese suppliers without concern. U.S. dominance seemed invincible. But when Japanese suppliers "bought" 40 per cent of the 16K Ram market, using what the Americans term predatory pricing tactics, attitudes changed.

"With the 16k Ram they bad a field day because it was the highest volume circuit ever produced. This collapsing price situation has now carried over into the (next generation) 64k Ram area pre-empting the 64k Ram going through its oormal experience curve in pricing," John Welty, president of Motorola said at a recent industry meeting.

" It takes a reasonable amount of profit for the semiconductor

Japan v. U.S. LOUISE KEHOE

industry to fund research and development on newer, more sophisticated integrated circuits," Mr Welty continued. "While our 64K Ram customers products they buy today they are really mortgaging their

man of the semiconductor industry association has beeo active in the formulation of a scheme to co-operate in funding basic research in semi-conductor technology at U.S.

to two of the underlying problems of the U.S. semiconductor industry: the rising cost of research and development and the shortage of electronics

Another co-operative venture, with more immediate commercial goals, has been proposed by Control Data Corporation, Last month, the company's chairmn, William C. Norris, hosted an industry meeting at which he by U.S. computer and semiconductor companies.

Such a proposal is revolutionary in the U.S. since it would almost certainly require changes in anti-trust regulations. Mr Norris maintains, however, that it is essential to the survival of the U.S. semiconductor

Despite the strong statements of Mr Norris and other industry figures, some analysts believe that the Japanese threat has been greatly exaggerated.

control technology

There bave been problems

switching problems but Rhopoint of Oxted, Surrey,

appears to have come up with some answers with its new

range of ultra-low thermal

In Germany, Helmut Manell

Transducers MAX COMMANDER

(D5604 Neviges, AM Rosen-

hugel), offers a complete

including all connections, panels, display switching and control elemeots. The inter-

orientated products and is successfully exporting to Japan. The company's range of two and three pio thermocouple consists of a metal section ensuring homogenous contact at all times includes 10 compensated colour coded thermo-

at all times includes 10 compensated colour coded thermo-sated colour coded thermo-couple types in standard and miniature sizes.

The grid/tile facing, an assembly, wlring and network can be assembled to operations manual, crypto-form a flat or curved surface.

The same company has also

As an addition, Mayell has

control bardware systems which a wide selection of discrepancy includes bench top, panel and toggle switches, and pushmounting and hand-held thermobuttons, with or without illumerature and relative humidity measuriog instruments. Included is an energy limiting sealed and offer protection temperature controller and an against touch, solid substances the PCB accepts buad rates from 50 bps to 19.2k bps the user inputting the 64 bit keyword from a computer terminal the board contains a dual port encryption device with a LED display for status and error message.

room hardware system,

lectro-magnetic relays.

Its Series 3400 relays are designed as iopnt devices for low level switching applications such as data acquisition systems, process controllers and monitors, data scanners.

multiplexors and digital and analogue multipoint recorders.

In Germany, Helmut Manel

control elements. The inter-active mimic display is of high a kit offered by the company for

TRANSDUCERS—io journalis- eight chanoel alarm scan unit.

So, despite their falling earnings, U.S. chip makers are spending earnous sums on updating and expanding their proment of the marker: mos (metal duction facilities) oxide semiconductor) memories and cmos (complementary metal oxide semiconductor) static memories.

> A Japanese presence in all other sectors of the U.S. market has been limited, the report points out. Significantly, Japanese chip producers do not have the software and systems exper-tise needed to support microsales, H & Q believes.

> While this may be true, the Japanese have been quick to take advantage of U.S. microprocessor technology. Nippon Electric Company, for example, is now believed to be the second largest producer of Intel'a very successful 16-bit microprocessor, and Hitachi has recently begun production of the competing Motorola micro.

between U.S. and Japanese producers have become common over the last few years, and the build up of relationships between U.S. and Japanese firms may go some way towards smoothing trade relations

Another trend that may work out some of the problems is that U.S. firms, such as Texas stantial production facilities in may be getting a bargain on Japan. Japanese producers are also setting up assembly plants in the U.S.

future."

A somewhat different view is expressed by Robet Noyce, vice-chairman of Intel. "Limiting in Europe, Already, price wars the imports of one product won't in the European markets have solve any problems," be says. reached the point where U.S. Mr Noyce, in his role as chair-manufacturers are complaining that they are unable to make any profits on their sales.

Underlying the marketing battles is the more long-term question whether the Japanese have in fact moved ahead of the U.S. in semiconductor tech-He views this as a solution nology. While Japanese chip manufacturers have perfected the art of high volume manufacturing of standard inte-grated circuit devices — as evidenced by their success in the mass markets for ." jelly been" products such as dynamic Rams—there is little evidence so far to suggest that they have the innovative design capa-bilities of such U.S. companies as Intel and Motorola.

This is not to say that the presented his idea to form a Japanese are not capable of research and development cor-poration to be funded jointly scenario for the future of the U.S. v Japanese competition predicts that the Japanese will capitalise upon their progress in memory devices to become the major producers of all standard semiconductor devices. U.S. companies, meanwirile, will maintain and expand their lead in custom-designed parts. _

At the same time, U.S. semiconductor houses are increasingly moving into systems hat the Japanese threat has markets where they can gain more profits from their costly development of original designs cisco investment bankers Ham- in the microprocessor field.

and humidity.

Norsem Optoelectronics in Hartlepool, Cleveland, is well known for its expertise. Now it is pinning its bopes on the NDM 3D5 3½ liquid crystal display panel meter module.

Norsem bas also obtained a number of farthering for onto

data encryption techniques will play an increasingly important role in the financial world.

Brokerage transactions, fund transfers and almost all City style movements of money or documents will need special security systems.

Pronto Electronic Systems in

Essex is offering Western Digital's WD2001/2002 series of monolithic data encryption devices. Data can be encrypted

and decrypted for later use and

stored in a coded cipher free

documentation.

The PCB accepts buad rates

from unauthorised entry.

Growing but still costly

Inmos was set up in 1978 by two Americans, Dr Richard Petritz and Dr Paul Schroder, Petritz and Dr Paul Schroder, and one Briton Mr Iaun Barron with substantial backing from the National Enterprise Board. Government backing for Iamos is now nearly £100m, In equity, The National Eoterprise Board, now part of the British Tech-

its new 64-K Ram chip faces strong competition from established semiconductor giants and there is already a number of Japanese com-

Inmos's microprocessor which

Jason Crisp

MOTOROLA Claims widest

range

MOTOROLA CLAIMS to have the broadest product range of any electronics component manufacturer in the world. The company's "semiconductor product sector" as it was renamed last year, had sales last year totalling about \$1.3bn.

The company is a major manufacturer of discrete components: transistors, resistors and the like. As other component manufacturers have dropped out of this less glamorous end of the compo-nent business, Motorola bas increased its market share, so that although the discrete market is not growing. Motorola'a sales are.

In integrated circuits, Motorola is the top U.S. producer of 64k Rams, and second only to Intel in microprocessors. Both markets are highly competitive and Motorola, as much as any other producer, has suffered from the reces-

sion. Through its recent acquisition of Four Phase Systems, a computer manufacturer, Motorola is entering the data processing market. At the moment, bowever, the corporation's chief interests are in communications equipment (with sales of over \$1bn), semiconductors and other types of electronic systems.

Louise Kehoe

NATIONAL SEMICONDUCTORS

Leaders in circuits fie ld

WITH INTECRATED circuit sales of an estimated \$670m in 1981, National Semiconductor fell from second to third place among U.S. producers. The company's earnings have been severely reduced by economic pressures and dropping memory prices over the past year. Another problem for National bas been its disqualification as a supplier of some military products due to alleged failure-to comply with Department of Defense productioo and testing rules. National is, however, a dominant supplier in several mar-ket sectors, notably the linear circuits market. In bipolar technology National is a leader, and it is also develop-

ing a strong position in CMOs hecome a major challenger to today's Mos (metal oxide today's Mos (metal oxide semiconductor) technology. In microprocessors, National is soon to begin volume production of its new 16-bit microprocessor. The device is believed to be the most advanced of its type, but National will be up against tiff competition from classific

stiff competition from aiready established suppliers. Apart from standard products, National makes custom integrated circuits for individual

Ram chips to be made at Gwent

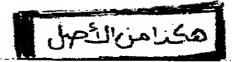
INMOS, the British state-backed producer of mass-market microchips, is shortly to start making 64K Random Access Memory (Ram) chips at its new factory in Gweot, South Wales.

guaranteed loans and grants. nology Group, is drawing up plans to sell a substantial part of its 75 per cent stake io Inmos.

Sales at Inmos are running at over \$1m a month largely in 16K Ram chips produced in the U.S. Inmos strategy is to offer high performance chips which can command a premium price.

panies sampling the next generation of memory chips, the 256-K Ram.

it calls a "transputer" will not be available until 1984 although the company is to start talking to potential customers next year. Inmos claims the transputer will be a major technological jump with sufficient attraction to wean companies away from standard microprocessor systems in which they have a aubstantial investment.



ELECTRONIC COMPONENTS III

Application

Military

EDP

Consumer

Industrial

Telecom, and

communications

FERRANTI

in market

for ULAs

THE British company

Ferranti has successfully pioneered a special microchip

which has become one of the fastest growing areas in the semiconductor industry. Although Ferranti now faces

strong competition from the

semiconductor giants—with many times its capacity in microelectronics—it still bas between 30 and 35 per cent of the world market foc

uncommitted logic arrays (ULAs) worth \$150m.

Demand for ULAs is currently growing at 40 per cent a year and the market is expected to be worth \$1bn within five years. ULAs—known in the U.S. as gate

arrays or semicustom logic-are standard chips which can

be customised for a special

function at the final stage of manufacture. The advantage is that it greatly reduces the

lead times and cost to produce

a new special microchip.
Ferranti's ULAs are being

used in a bost of applications

from mainframe computers to dishwashers, from telephone exchanges to cameras. One ULA chip replaced 18 microchips in the tiny Sinclair ZX81 computer, others are used in the Monarch PABX, made by GFC and Placesor.

made by GEC and Plessey.

Dr Alan Sbeperd, managing director of Ferranti Elec-

tronics expects the company

will continue to expand at

over 30 per cent because of

the very strong demand for

March 1981 Ferranti Elec-

Californian company Inter-

design, bad sales of £27.1m,

which is 10 per cent of the

Ferranti

tronics.

turnover.

In the year ending

s'querg

including

IC MARKETS IN EUROPE

Overall policy is lacking on semiconductors

world's third largest market for semiconductor products after the U.S. and Japan. Yet its own indigenous manufac. The national instruments used turers have managed in recent years to cover only about half of its requirements, with most of the rest being supplied by American companies.

According to Dataquest, a leading U.S. market research house, Europe accounted for 20 per cent of the world market for semiconductors last year, valued at \$13.5bn, while producing 9 per cent of world. These measures are used in output. The Enropean mar-ket's share of the total is expected to fall to 18 per cent this year—reflecting a strong surge of demand in though Europe's production is forecast to edga up to 10 per cent.

Control of the Contro

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Europe can also boast only two companies in the list of the top ten semiconductor manufacturers. They are Philips, the Dutch group whose geographically-diversi-fied operations include Sig-netics, a sizable U.S. company acquired in the mid-1970s, and Siemens, the largest West German electrical and electronics manufacturer.
Redressing the balance has become an increasingly important objective for a number

of European countries during the past decade.

They are concerned with more than just their adverse trade figures in component supply. Semiconductor technology is: now perceived in many Euro-pean capitals as the mainspring of the new electronics revolution and its possession as a determining factor in future industrial development. in the development, design

Without autonomous capacity and manufacture of integrated circuits, it is feared, Europe will be condemned once again to trail behind the U.S. in tomorrow's growth sectors.

This, anxiety is particularly acute in France. But to date, there is no Europe-

wide policy on semicon-ductors. In spite of efforts by the EEC Commission to win the support of the Council of Ministers for a ioint research and develop-ment programme, national measures predominate. The only issue on which there can

is the maintenance of an EEC tariff on semiconductor imports.

to try to promote the semiconductor industry take a variety of forms. These include support for research and development, Government procurement policies, investment grants and subsidies, encouragement of mergers and industrial reorganisation and incentives for foreign investment.

different combinations, and in different degrees, in each European country. A brief look at recent developments inside the bigger EEC member states illustrates the considerable variations that

European competition

GUY DE JONQUIERES

exist in the pattern of Government policies and industrial structures. Britain: None of the major electronics companies, such as the General Electric Company, Ferranti Plessey or Thorn-EMI manufactures mass-produced "standard" microchips. GEC considered mounting a UK-based joint venture in this field with Fairchild of the U.S., but the proposal was dropped two years ago.

Instead, British companies have concentrated on more specialised semiconductors to concentrated be used in specific applica-tions, often determined by their own manufacturing requirements. Ferranti bas established a strong position in the growing market forsemi-custom" devices using technology which it

pioneered. The only UK entrant in the mass-market is Inmos, the state-owned venture set un three years ago, in which almost £100m has been invested immos plans to make both memories and microprocessors in Britain and the U.S. Commercial production

INTEGRATED CIRCUITS WEST EUROPEAN MARKET End 1981 \$m 1980 †1986 France 254 640 713 1,445 Germany 315 France 388 480 Rest of Europe 230 255 Total 1,820 2,030 3,800 Total 1,950 3,800 † Estimated. † Estimated. Mackintosh International. Mackimosh International

is only just starting and it is too early to say how it will fare in the intenselypand its operations. competitive world markats. Rather more public money has been spent on attracting foreign investment by U.S.

and Japanese chipmakers, particularly in Scotland. France: In 1978, the last Government launched a "Components Plan" providing for state support of FF_T 600m (subsequently expanded to FFr 800m) over four years. The money has been chan-nelled to five companies or "poles," each of which has been encouraged by the Government to concentrate on particular aspects of semiconductor development.

Tha French Government also belped French companies to forge alliances with U.S. manufacturers — Thomson with Motorola, Matra with Harris and Intel and Saint Gobain with National Semiconductor.

The Mitterrand Government is expected soon to launch a new and expanded Components support of as much as FFr 2.5bn over four years has been discussed.

restructuring of the French industry is also on the cards: there bas been speculation that after the completion of nationalisation plans, St Gobain may withdraw from semiconductors and Thomson may become the pivot of the industry. The future shape of Matra-Harris-Intel is somewhat unclear.

Vest Germany. The Federal Government provides no state funding specifically for the expansion of semiconductor manufacturing. But the indus-try benefits both directly and indirectly from Government programmes which emphasise research and development and the application of microelectronics by equipment manufacturers.

The country's biggest semiconductor manufacturer by a considerable margin is Siemens (other companies include AEG-Telefunken, Bosch and a subsidiary of Philips).

Since the mid-1970s, Siemens has made a major effort to ex-

at a heavy financial cost. Siemen's component operations have physical descriptions have physical descriptions. But this progress has been made tions have plunged deeply into

Italy: The main Italian semiconductor manufacturer is SGS-Ates, part of the Stet national telecommunications group. The product of successive mergers, SGS-Ates has a history of beavy losses and has suffered from lack of firm management supervision from its parent, which continues to subsidise it. Within the past two yaars, how-

ever, a recovery strategy has been initiated under a new management composed largely of former Motorola employees. It has launched an ambitious plan to return to profit by 1985 by huilding up international sales of components aimed at telecommunications and con-sumer electronics manufacturers. Discussions have been held on the possible purchase by Olivetti of a stake in the company.

At a time when even the giants of California's Silicon Valley are feeling the chill wind of recession and intensified Japanese competition, how realistic are Europe's chances of establishing a major role in the world semiconductor industry?

A study published last year by Sussex University concludes that a major breakthrough is unlikely. Though Europe may increase modestly its share of world production, the study forecasts that the industry is likely in future to be dominated by an "oligopoly" of big companies.

Although the study says that Philips and Siemens may be members of this club-along with U.S. and Japanese manufacturers—it suggests that their success will be largely due to their own efforts, not to Government policies. As a result, their main allegiance will be to world markets and not particularly to Europe.

Microchip sales rise

PLESSEY SEMICONDUCTORS chips which account for 15 per expects turnover in the financial cent of sales. Semi-custom chip year to March to have risen by volume—using cell based arrays 23 per cent with the sale of -is growing at 180 per cent a 20m units, in one of the most year. depressed years the semi- Piessey claims to bave a conductor industry has known. dominant share of the world By value, half of Plessey's semi-

conductors are exported. About 30 per cent of its products are used in telecommuni- It also reports a significant cations and a similar volume for growth in demand for products industrial and consumer goods. Just under 15 per cent of Plessey Semiconductors output drills and hairdriers. are digital linear circuits for radio communications, and professional, consumer and citizen

Other main markets include radar (6 per cent), UK military (11 per cent) and instrumentation (6 per cent). Plessey says there is a sharp growth in the volume of its custom micro-

Percentage

1980 1985

24

23.

26

18

4

17

25

23

Strong base in ICs

GEC's semiconductor operations were substantially reorganised in 1980 after a planned joint venture to make standard mass market microchips with the U.S. company Faircbild collapsed.

The new company Marconi Electronics Devices (MED), brought together GEC Semiconductors, AEI Semiconductors and the microelectronics divi-sion of Marconi Space and Defence Systems. A 40,000 sq ft factory was built alongside another new factory at Lincoln making microwave components and was completed in less than a year, All GEC's integrated circuit production has heen transferred to Lincoln where 1,200 people are employed.

GEC's semiconductor sales

total £25m a year. In addition its U.S. subsidiary Circuit Technology (CTI) at Long Island, which makes specialist hybrid semiconductors, has

market for frequency synthe-

sisers used for cable television. which is booming in the U.S.

used for power controls in con-

sumer products such as cookers,

Japan is a significant cus

tomer of microchips for fishing

boat radar and power controls

for bairdriers and underfloor

heating. At the height of the

citizen band boom Plessey sold

2.5m circuits to Japan to put in

annual sales of \$20m. About balf MED's business is hased in integrated circuits which are increasingly incorporated in sub-assembly hybrids. About 20 per cent of the devices produced are micro-wave mainly used in defence applications.

The major markets are industrial, telecommunications and military application, and about half the company's sales are to other companies in the GEC group. Direct exports account for about 15 per cent of sales.

INTEL

Falling prices hit innovation

INTEL is known as the innovator of silicon valley, and is running hard to keep up the reputation. The company aims to introduce over 125 new products this year. Many of these products will not however be in the components

Intel has gradually increased its interest in systems markets over the past conple of years and systems now account for about 40 per cent of the company's sales.

Intel's sales of integrated circuits totalled around \$544m in 1981. The company's strength is in microprocessors, where it leads in the 16-blt market with the 8086. Through a wide ranging technology exchange agreement with advanced micro devices the costs of new product development in this area.

Last year Intel opened its "silicon foundry" operation -through which it has entered the market for manufacturing customer designed

Like all U.S. integrated circuit manufacturers, Intel has experienced a slump in profits over the past year, due to the recession and falling prices. Intel reckons to have lost \$100m in carnings due to dropping pelces on its memory products. The com-pany has only just enlered the battleground of the 64k Dynamic Ram market, but aims to become a major sup-plier by the end of the year.

Louise Kehoe

FAIRCHILD

R & D spending lifted to \$100m

tion facilities.

valley, Fairchild, was the taken over by Schlumberger, the This year they are expected to spawning ground for today's oil-services giant, Since then, total about \$340m.

industry leaders. Charles Fairchild has been going The new management team industry leaders. Charles Fairchild has been going Sporck, president of National through radical management Semiconductor, Jerry Sanders, and structural changes aimed at president of Advanced Micro Devices, and Robert Noyce, vicechairman of Intel, are all Fairchild alumni.

While companies started by ex-Fairchild employees grew to become industry leaders, Fair-child itself fell pitifully behind semiconductor technology through the 1970s. Fairchild has, however, been very successful in the test equipment Jason Crisp market.

regaining its strength in electronic components. Faircbild bas substantially increased its spending on research and development, and on modernising and expanding its produc-

In 1982, Fairchild is expected to put close to \$100m into R and D and \$200m into capital spending. The company's sales failed to exploit its lead. are, however, on a steep downward path. Integrated circuit

In late 1979, Fairchild was sales were about \$450m in 1980.

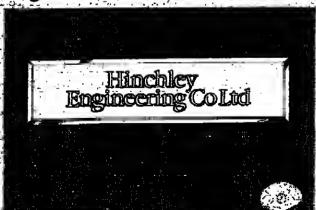
The new management team at Fairchild bas a long way to go to rebuild Fairchild's reputation as a technology leader. The company's history is one of missed opportunities.

Fairchild was the first company to develop silicon-gate metal oxide semiconductor technology now used by others to build most microprocessors and memory circuits but Fairchild

It pays to open a few doors.



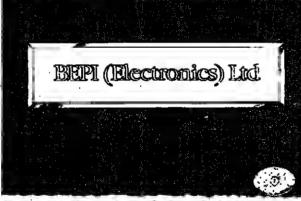
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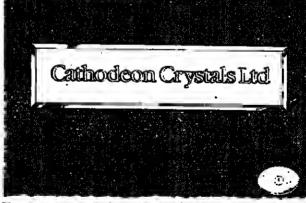
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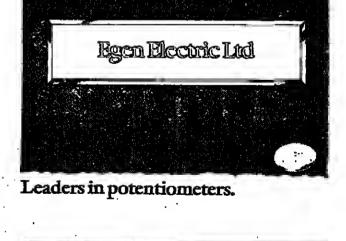
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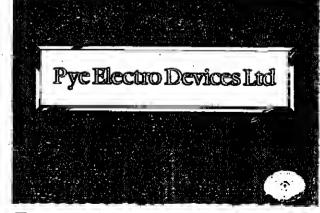


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someone else's. Someone like Mr Noguchi here-joint managing director of Mitsubishi Electric (UK)

Limited. His opinion, biased though it is, carries a

lot of weight. "Our criteria were simple," he says. "We needed first-rate, skilled labour, local component manufacturers, and a market for our products.

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Armchair vision of brave new world

IT'S TOUGH being an elec- El Salvador. tronic consumer. You sit in It all sou So the programme isn't so good a sack of potatoes and three —record it on your superb pounds of butter from Tesco.

Wife is just returning from the Financial Times that I no the Women's Institute meeting longer need to come to the —the garage doors open auto-office, matically for her while the Just think. I can awake, dial latest electronically controlled the News Desk and through my magnetic lock (when she is bedroom VDU phone a story, inside the house, of course) turns your property into some sort of electronic fortress.

Whether you like it or not, you are an electronics consumer. If you have hought a has been reported to deathnew car in the past couple of months it might be worth look ing under the bonnet and at the dashboard. Recognise any-

This item was going to be model railway system. Then it compute ahout cable television. How the was a carving knife, sundry bits that... little box at the end of the of balsa wood, a few bits of I lo cul-de-sac would provide you with 30 or more channels of entertainment and information. envisaged you sitting in that

It all sounds like an elecyour armchair, turn the on/off tronic Utopia. I shall be able button or switch channels— to call up my bank and stop with your remote TV control, the mortgage payments, order

> and perhaps I can even convince design the page, write the head-

lines, make corrections and still not ahed my dressing gown. But let's come down to earth the cable television system and look at the home-based electronics enthusiast.

The modern electronics holbyist is the successor to the chap in the 1930s who built his metal and a hacksaw.

A model railway lay-out is still good fun but with a bit of electronic expertise you can simulate the sound of a Great Western steam engine and make armchair with a dish aerial on simulate the sound of a Great the roof picking up space Western steam engine and make signals; the latest news from it whistle at appropriate points

technical Press. A visit to complete electronic kits from and equations. Smiths or most bookshops pro- £49 to £175 hlack hoxes packed vides a bewildering array of with punch.

electronics magazines All are splendidly produced,

> Electronics in the home MAX COMMANDER

lots of colour and very strong on diagrams. (They have to he for the ordinary mortal to understand them.) "Projects" seems to be the in word. Build your own home computer, huild this, build

offers a 10-page supplement, 10 off from designing BASIC comprojects, more than 50 circuits, puters and arcade games... free competitions with £500 in prizes, a digital multimeter, his amplifier, plus much more... Electronics Today is first

packed on to a chip, the inte-grated circuit has become more

of a sub-system than a com-

ponent. So many of the func-tions of a system are held on

so few chips, that the old defi-nitions begin to hreak down.

Similarly, it is becoming more difficult to describe accurately one electronics firm

as a systems house, and

another as a component manu-

facturer. Increasingly, system manufacturers are making some

of their own chips, and chip-

makers are building some of

their chips into systems.

When Intel, generally considered to be a component maker, says that 40 per cent of

its revenues come from system products, one might well ask

which products it considers to

chips components or systems?

developed its own 32-bit chip

using some of the most advanced semiconductor proces-

strictly for in-company use-are

growing much faster than the merchant market producers. By

the end of the decade, the value

of devices produced by the cap-tives in the U.S. are expected to

equal that of merchant market

Aiready the captives make one third of all the integrated

circuits (by value) produced in

set and is manufacturing it

Move to Watford Electronics (you will need your glasses for the close five or six point type-setting). The computer corner offers you switches, transformers, crystals, relays, transducers. buzzers and books about all of

This marvelious magazine follows on with three pages of News Digest looking at the electronic developments of the decade.

First - class headlines.
"Tweeters that go cheap,"
"Electroware, OK?," "Sticky
Clips," "Video Victory," and
a beautiful one—"Grabbed by
the Dooleys." the Dooleys." With a headline like that, one

I looked, particularly at just had to read it. It starts Electronics Today. The April off: "Those tireless chappies issue is their 10th birthday. It down at Casio have taken time

on the track.

This is the real armchair class on its graphs and diather the doi:100. The doi:10

sort of leading article headed "10 Years On" in which it reviewed the dramatic history of electronics since 1972.

The hirthday issue charted the course of the news pages, the first calculators, the first digital watches, the first MPU chips, cheap memory, the first Space Shuttle tests, bubble

With commendable honesty records manufacturers' successes, failures and its own gaffes. It ends: "It'a an interesting conjecture as to what we ahall be able to include in our 21st hirthday issue." Any

The manufacturing of devices for in-company use is a fast-growing sector

milli-roentgen per hour and one

The magazine produced a roentgen per hour.
ort of leading article headed As Radio and Electronics World says, the unit will find many applications in schools.

hospitals, power stations or any branches of industry using radioactivity materials.

But then one gets to the real nitry-gritty under a cross-heading which says: "After the Bomb."

Quote: "A nuclear radiation monitor is likely to be a very valuable asset to the survivor of a nuclear war. The levels of radiation are likely to be much higher than that measured with the R and EW monitor.

21st hirthday issue." Any guesses?

So you have every little bit of electronic gadgetry installed.
What's left? How about a meaningful readings..."

In locking up the following source to give meaningful readings..."

nuclear radiation monitor? Fm locking up the house, Ideal, after the holocaust. Radio and Electronics World says its hand-held monitor will detect and taking the circuit descripgamma radiation, producing an audible click for each quantum of radiation received.

tion to my fall-out shelter. The trouble is I do not appear to have a project to build this.

THOMSON-CSF

Defence benefits

THE SOCIALIST planners who shareholding partners in their have heen rethinking France's microchip ventures, is master microchip strategy want a less dispersed industry which is able to invest close to \$1bn between

This leaves it licensing agree now and 1985. Detailed plans are not available yet but it seems clear that the chief role

will he given to Thomson-CSF, The company, now under state-control, but with an un-changed team, already leads as a supplier to the French market, with total component sales last year of \$560m, three-quarters of these in France. It was one of three French companies to get hacking under Giscard for Metal Oxide Silicon (MOS) circuits—and unlike the others was able to spend it all oo research and development. Its bipolar circuit side is heing amalgamated with Efcis,

joint venture between Thomson and the Atomic Energy Commission (CEA) which went into standard circuit production under the first com-ponents plan in 1978. Thomson-Efcis, as it is now called, which

former CEA man, is an enthu- Consumer products, M Mirat slast with a helief in a special slast with a helief in a special points out, are where the Freoch aptitude for conception Japanese started for their He sets store hy the fact that husioess. Thomson, unlike Matra and Saint-Gohain which have U.S.

This leaves it free, despite a licensing agreement with Motorola, to negotiate with other foreign companies— which it is actively doing. The Japanese, says M Mirat, have proved the benefits of shareholding independence. But Thomson also has another reason to keep to itself—its big defence involvement.

It is preparing to launch a new generation of products, concentrating on areas where it can produce innovative, key components using its own technology. The main lines are telecommunications and videotex systems, microprocessors and mass consumer productsfor instance, components for electronic video cameras.

Being part of a much larger recently nationalised Thomson-Brandtis seen as giving the company two big advantages. One is a keeps the CEA in as a minority pariner, expects turnover of \$125m this year and \$400m-plus in 1986.

Its head, M. Paul Mirat. a French household electricals.

Where do-it-yourself pays off

dale, Arizona. Other major manufacturers in the captive class include Western Electric, which makes devices for AT & T and Delco, a subsidiary of General Motors. All the major manufacturers, Hewlett-Packard.

Captive suppliers LOUISE KEHOE

Burroughs and Data General have some in-house component production capabilities: either pilot production lines for making prototypes, or full-scale high volume facilities.

be systems-and which com-Why should these electronic systems manufacturers decide Take, for example, the Intel 32-bit microprocessor chip set. This is one of the most advanced implementations of VLSI (very to take a do-it-yourself approach to chip production? Some have their own production lines in order to ensure a large scale integrated circuit) design to date. On five chips of ready supply of key parts. Hewlett-Packard, for example, recently signed a technology sillcon resides the power of a mainframe computer. Are those exchange agreement with Hitachi which will allow HP to Moving in the same direction, Hewlett-Packard, known for Its dynamic random access memory chips using the Hitachi instruments and computers, has

design. One of the advantages of inhouse manufacture is that the sing technology in the world.
"Captive" chip manufacturers
—those who produce devices design through prototyping to full-scale manufacture can be controlled and speeded up. IBM has a special production line believed to be the most highly automated in the world, that it uses for urgently required devices. As well as being the largest chip producer, IBM is now leading the technology of chip production.

Another reason for captive production may be that there is a need for a special "custom" ship not available from a mer-Most of the large captive component manufacturers are chant supplier. If the systems computer companies, the largest being IBM which alone is expected to manufacture \$2.1bn worth of ICs this year, making it the largest IC promanufacturer designs to chip himself, he may want to guard that expensive proprietary design and keep its manufacture inside the company.

suppliers.

Domestic leader

LIKE Japan'a other top elec-tronics manufacturers, Hitachi and NEC, Fujitsu is heavily involved in both computers and integrated circuits. The company's computer division overtook IBM Japan in the late 1970s to occupy the first place in Japan's domestic market. In integrated circuits Fujitsu probably ranks fifth or sixth but the company stresses that this relatively modest position belies some very special strengths.

very special strengths.
Fujitsu has deliberately avoided competing with NEC and Hitachi in the manufacture of semiconductors for use in coosumer products such as TV sets or electronic calculators. Instead it has focused on the kinds of ICs that are used in computers, automation machinery and communications equipment. Fujitsu claims first or second position among Japanese manufacturers in these

specialised areas. position in 64 kilobit dynamic Random · Access memories is described as "very strong" and the company claims to possess the world'a most advanced technology in gate array and semicustom logic circuits. If Fujitsu differs from its large Japanese rivals in having

focused to date on a few carefully selected market sectors it resembles them in having pursued an extremely aggressive development and expansion policy during the past few years. Investment

ning at an annual rate of Y30bn (\$121.45m) per year for the past three years and is expected to remain at roughly this level.

This works out at around 30 per cent of the (current)
total value of the company's
IC production (about Y100bn
per year, including Y20bn
worth of "in house" production). Fujitsu has not only gone all

out to increase production capacity. It also took an active part in the Japanese Government sponsored project for joint development of hasic Very Large Scale Integration know-how which ran from 1976 to 1980. Fujitsu's four partners in this project four partners in this project were its principal competi-tors, NEC, Hitachi, Toshiba and Mitsubishi Electric. However, the joint research project confined itself to developing basic know-how for the manufacture of 64 k Rams. Design of products for the market was carried out separately by each company after the joint project ended in spring 1980.

Fujitsu today produces inte-grated circuits at five factories in Japan, as well as one in Ireland (where its assembly plant went on stream in 1981) and one in

San Diego, California. In the context of Fujitsu's overall operations integrated circuits are still easily overshadowed by the dominant computer division.

Charles Smith

capital investment (production equipment for a moderate semiconductor production facility now costs in the region of \$20m) required to act up a semimanufacturing conductor With the exception now of the 64K ram. Hewlett-Packard makes only custom-designed

chips on its own wafer fabrication lines. In Fehruary, HP needs for revaled its "super chip set," a and to off group of devices that HP will to others. use to build a new computer system later this year.

The super chips—which hold as many as 450,000 transistors are three times as closely packed as any now available on can buy elsewhere, and is only the open market. HP's chip producing custom devices.

AS SEMICONDUCTOR chips ducer in the world, according Alternatively, the systems technology is fast becoming rapidly hecome denser, with to market analysts Integrated manufacturer may, as it were, recognised as among the most more and more transistors. Circuit Engineering of Scottsexpected to increase its internal to a silicon foundry service such chip production to around \$160m worth of devices this as that offered by Intel. The silicon foundry offers the systems manufacturer many of the

advantages of in-bouse produc-tion, without the enormous first "standard" chip product While HP has recently put the on its in-house production lines, another computer maker, National Cash Register, is moving in the opposite direction to start selling some of its own designed parts on the merchant market, and NCR is offering other systems manufacturers silicon foundry services too. NCR's objective is to produce about 60 per cent of its internal needs for semiconductor chips and to offer left over capacity

By contrast, Burroughs, another major computer maker, is cutting back on its chip-making activities. The company has stopped making chips that it

FINANCIAL TIMES SURVEY



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7 July 1982

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ELECTRONIC COMPONENTS V

A world where silicon still dominates

DARWIN WOULD have liked the semiconductor industry. Its principal evolutiooary path nologists try new methods and improve old ways of cramming even more devices onto a single quarter-inch square chip of the material by increasing the speed of the device but using and shelved it.

less power.

In the meantime, HP went

Along the way, however, 2 obsolete and overtaken by better ways with silicon, but still in existence because they fit a specific market niche. A good example is a tech-ology called "silicon-on-

nology called "silicon on-sapphire," plooeered by Hewlett - Packard, the U.S. electronics giant. Involving the laying of fine silicon tracks on a alice of sapphire, it was pioneered in the bope it would provide a better combination of speed and power than

station.

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Silicon Valley success

RIDING the wave of success in the custom chip business is American Microsystems Inc. While other chip-makers have regarded custom devices as a sideline, 75 per cent of AMI's revenues come from tailor-made circuits. Throughont the current recession in the semiconductor industry, AMI has remained profitable, unlike many of its Silicon Valley neighbours:

AMI offers several different approaches to custom circuit design from conventional hand-drawn circuits through circuits built up of standard predefined cells, and semi-custom logic arrays that can be "customised" with one or two layers of interconnection that defined how the circuit functions. AMT is also the largest silicon foundry for ehips that have been designed. by systems manufacturers. Last November AMI was

taken over by Gould, the diversified U.S. manufacturer of electronic and electrical products. According to AMI, the takeover will not change "its" business plans, and the current management team will stay intact. In Europe, venture with Voest Alpine, the Austrian steel and engineering group. The companies plan to build a new manufacturing facility in Austria to make custom and standard integrated circuits for the European market.

HP built a perfectly conductors. respectable 16 bit micro- Why is s processor with it and used it is clear and fixed. Silicon will in the 9825 desk-top computer. continue to hog the stage The company now retains its centre for the foreseeable interest in silicon-on-sapphire future, as semiconductor technology but only because of machines like the 9825. Its research and development team decided 18 months ago that the technology had reached the end of its evolutionary life

on to devise and manufacture number of technologies some of the most dense logic struggle on as "living fossils." chips ever fabricated by conchips ever fabricated by conventional means in silicon. If there is no sign of a

replacement for silicon-"It is God's gift to Man" according to Dr Brian Tuck of Nottingham University's Department of Electrical Engineering—there is no sign of a halt to research invention of the ceotury. It for new and interesting certainly led, some 20-odd years for new and interesting materials which can be used for applications closed to silicon. Interoprocessor revolution.

The list includes gallium. These earliest transistors— which replaced large, expensive, dielectric. As Dr Tuck puts it: number of convectional pronaterials called glassy semi- producing valves—were fabriuse anything other than composed of gallium arsemde

Why is silicon so useful, and what are the limits to its use which makes research into

other materials necessary? Bardeen, Brattain Shockley invented the transistor, a solid state device with the ability both to amplify an electric current or act as a

> Materials technology

> > ALAN CANE

simple switch in 1947. It was, some would argue, the major

cated in germanium, a material silicon." of the same chemical group as

and from smelting zinc—and some of the most sopnisucated ensis- germanium transistors had a high speed counters points out them suitable for use as power second. A counter fabricaled in transistors, and germanium acother material which is power transistors are still exciting considerable interest marketed today.

Silicon-with most of the advantages of germanium and none of the drawbacks-seemed to indicate to physicists that nature, for once, was on their in 1954

Shicon is cheap, plentiful (it makes up some 20 per ceot of the earth's crust), easy to handle. It has an oxide which later to what we now call the is useful in the fabrication of

Silicon has its limilations, especially in speed. Mr David Germanium is fairly rare-it Wilcox, a design engineer at can be obtained as a by product Plessey, which bas developed limited temperature range. They that a counter fabricated in did have, however, a fairly low cooventional silicon can rue at operating voltage which made 1.8 thousand million cycles a

هكذامن الأجل

could rue twice as fast. Gallium arsenide is probably the most important of the newer semiconductor materials. Research into its properties and side. The first silicon transistor potential is being undertaken was made by Texas Instruments at a series of commercial laboratories throughout the world including Bell Laboratories, Burroughs, Hewlett-Packard, IEM, ITT, Texas Instrumeots, Philips, Plessey, Thomson CSF, Fojitsu and

these days, gallium arsenide,

The high power lasers used for communications through glass fibre optic waveguides utilise complex compounds such as gallium indium arseoide phosphide to achieve exactly the right wavelength.

Gallium arsenide circuitry offers the possibility of high speed computation in a system which would not need elaborate cooling methods because of the lower power requirements expected of gallium arsenide lower

Fujitsu, ooe of the three big Japanese mainframe computer manufacturers, is well advanced with a super computer with logic based on GaAs. Strategic Incorporated ootes: "If Fujitsu's efforts are not taken seriously, and if similar development programmes are not initiated in the U.S., Fujitsu is likely to become mainframe computer market-place based oo the use of GaAs technology."

So wby are all the major jumping on the bandwagon? According to Dr Tuck, who has been working on GaAs for almost 20 years, it is more expensive than silicon and more difficult to haodle. David Grundy Techoology Director for Fer-ranti Semiconductor, puts it more pithily: "It is a swice of a material to handle. Further-more it gives off toxic fumes during processing.

The cost difference is significant; several hundred dollars for

A vast oew market has opened up for "customer designed" cbips. Industry estimates suggest that over 40 per circuits, which are often called pared with only \$5 for silicon. According to Strategic (whose report is available from IPI, 134 cent of custom chips will be designed by systems manufacturers by 1984.

circuits, which are often called semi-custom circuits, are a matrix of unconnected logic functions. The logic arms. Holland Park Avenue, London Will, at a cost of £875) the functioos. The logic array is worldwide market for GaAs procustomised" by adding a ducts will rise from only \$2.7m at "silicon foundries," more layer or lwo of intercoonec-often than not the idle productions that define how the circuit

in 1981 to \$1.9bn in 1990. All the usual market sectors performs. Gate arrays offer a served today by silicoo products are expected to make use of GaAs integrated circuitry.

development cycle and are cheaper for lower volume David Wilcox of Plessey expects the first advanced GaAs products within two years, which agrees well with predictions by Harris Microwave Semicooductor and Gigabit Logic, U.S. companies specialising in GaAs chips.

Evolution favours survival of the fittest; GaAs technology will certainly survive. Whether it cao conquer a major part of this silicon-dominated another matter.



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Tailor-made chips enjoy a boom

THE MARKET for standard consumer applications. electronic components is in a slump, but sales of "custom" made for a particular application—are booming. Industry estimates put the size of the custom chip market at \$680m today, growing to \$1.4bn by

growth in custom circuits has been brought about by several factors, some economic and other related to system performance reliability many advantages io terms of over standard components.

• Custom circuits save money. By placing more of the functions needed for a new electronic system on a single

Custom circuits reduce space and power requirements. Again, fewer chips mean a smaller

Custom circuits offer prosystem w components.

consumer applications. last year, the number of cbip For applications in which a Alternatively, they bave been designers in the U.S. was estiful custom circuit cannot be used in the rare instances when mated to be only about 2,000. -those that are tailor- standard components cannot meet the performance required

for a particular application. Making considerable use of computer aided design systems, chipmakers can now tailor a circuit for a customer's needs from a library of predefined circuit functions. The result-iog circuit may be slightly larger than ooe designed by semi - cooductor technology, hand from scratch, but the Custom integrated circuits offer cost savings in the design process outweigh the proportionately small disadvantages of additional production costs. Development time can also be halved to about six months. Another boost has been given

to the custom chip market by reduced.

Custom circuits are more searchers Lynn Cooway (of reliable. Reducing components Xerox) and Carver Mead (of cuts down on the number of Cal Tech). the widespread acceptance of

design methodology allows an electronic systems designer to design his own chips with a minimum of training again r pro-using computer aids, and Com-focusing on the system perforprietary protection. Com- focusing on the system perfor-petitors cannot duplicate a mance of the chip rather than with off-the-shelf the-for him-irrelevant details of optimal chip design.

Designing a new integrated circuit from scratch is however, a major undertaking. The development cycle typically takes about a year, and the cost is very high. Traditionally, custom circuits were only economically viable when very large quantities of the special special circuit would be required, for of people capable of designing example, in automotive and an integrated circuit. Until Louise Kehoe example, in automotive and an integrated circuit. Until

Custom circuits **ELAINE WILLIAMS** tion lines of the standard chip makers. Intel, one of the latest

These chips are maoufactured

foundry business, estimates and that it will grow to \$680m

There are, however, some performance trade offs as com-pared to fully custom devices. The logic array concept was pioneered in the UK, by Ferraoti, but now most of the companies to eoter the silicon major chip manufacturers offer a range of logic arrays with that the market for such different numbers of functions services is worth \$135m today, and built using different semidifferent numbers of functions conductor technologies to suit various systems requirements.

speedy-as short as 16 weeks-

Designers still strive to improve the performance of each

Rivalry between MOS and bipolar processes

FASTER, smaller, cheaper: these aims are always at the top of a semiconductor de-signer's list. Since the early 1960s it has been the pattern that every two years the complexity of a silicon chip doubles but the price con-tinues to fall.

Semiconductor designers strive to pack the components on the silicon chips closer together because the elec-tronic circuits can then operate more quickly since the electronic signals have less distance to travel. With memory circuits—used for storing information needed for computers, for examplethe aim is to cram more storage space in a smaller area.

At present, it is possible to store 64 k bits of information on a silicon chip and most semiconductor manufacturers are now developing memories four times that size which will push the present technology to its limits. Today the tiny elements which are produced by photolithography and chemically etched can be only one micron (one millionth of a metre wide) in size.

in the future the element will be even iess than one micron hat the industry will have to use X-rays or electron beams to draw the fine lines that define the size of the thousands of transisters on each circuit.

Technical developments in semiconductors still centre around making silicon chips operate faster and consume less power. This means that there is intense competition between the two main pro-cesses—bipolar and MOS (metal oxide semiconductor) which are used to make electropic circuits.

Bipolar process is generally considered superior for high speed and analogue applica-tions while the MOS technology is used for low power applications such as calculators and digital watches.

Over the years, however designers have been striving to improve the performance of both technologies so that the relative disadvantages of both are less apparent.

In general however, bipolar technology still remains superior for applications where digital signals have to be translated into analogue forms. This is necessary when converting from the digital world of computers to the analogue world of industrial machines which relay varying electric currents.

MOS, on the other hand, has found its niche in the world of microprocessors and

Developments ELAINE WILLIAMS

large-scale memories and has generally overtaken bipolar technology for many applica-

In addition to these largememories and microprocessors circuits which can be used in the telecommunications industry are under development. The telecommunications industry is now undergoing changes from electromechanical to completely electronics techniques and this, tied to the growth in automated office systems, is demanding silicon chips which can control the operation of telephone call

connections. Speech recognition and synthesis—where electronics can interpret and reproduce human speech—is an area of fascination and profit. It has been predicted that hy the end of the decade more than \$1bn will have been spent on circuits which can carry out

these functions. Companies such as Sharp, Toshiba, NEC and Texas Instruments are just a few of

those involved in their design. For many reasons, companies need special com-ponents which require a customised circuit but do not want to pay the price of having it exclusively designed for them. This has resulted in the growing popularity of logic arrays which are half way between a standard circuit and a special design. Coupled with strides in integrated circuit technology are important developments in connecting components to the printed circuit boards and miniaturising the assemblies on to which the semiconductor and passive components, such as resistors and capacitors are connected to make the complete circuit.

Hybrid microelectronic circuits, in effect tiny printed circuit boards, have been making steady rather than revolutionary progress over the past few years. Hybrid circuits are made by depositing conductive, resistive and dielectric materials in film form onto glass or ceramic carrier substrates.

Hybrids come in two forms: thick film, where the materials may be deposited by screen printing and subse-quent fixing in an oven, and, thin film, where the circuit patterns are formed by condensing vaporised materials

on to the substrates.

New developments in the use of lasers to trim the components in hybrid circuits to meet the design specifications and in photolithography which allows the patterns of the circuit to be drawn by laser are also extending the possibilities of hybrids.

In addition to these improvements passive compo-nent manufacturers, who make the resistors, transistors and inductors which form the rest of the circuits have also made important progress in miniaturising their compo-nents to fit hybrid circuits without ioss of performance.

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Electronics & Electrical Products

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inserted automatically by

machines that move the board about on an X-Y table while the

ICs are selected from storage

stacks and their feet pressed

Other machines can deal with

separate resistors and capaci-

tors from bandoliers of pre-

Then, the other side of the

Finally, the product must he

board is soldered up automatically on a flow soldering machine.

tested, he it component or board. For the IC maker the

problem is that cost of testing

each new high volume device grows with its complexity while

at the same time the price per

piece tends to drop. Thus, maxi-

mum flexibility and speed of

testing is the objective, while test quality must be main-

Half a dozen companies share

the IC/ATE market, now prob-

ahly worth about £200m per annum according to Dataquest,

the survey firm. Challenges

appear for the makers all the time and are helping to keep up

quite what it was in the buoyant 1975-79 period. They include

the 64k Ram, 16 and 32 hit

microprocessors and bubble memories—so the SC Industry

There is a frequently quoted

rule of thumb in the electronics industry: if it costs £1 to find

a faulty component at the com-

ponent test stage, it will cost

£10 to find it on the hoard, £100

in the equipment, and possibly

By 1984 the ATE market is

expected by Dataquest to reach

about £800m, although for the

moment the recession-induced drop in semiconductor sales is

bound to be reflected in test

equipment figures. So the mar-

ket leaders are locked in battle.

has to stay on its toes.

£1,000 after delivery.

sequenced components.

into the board.

tained

Aim is flexibility and speed

UNTIL ABOUT 1960, the Today, the CAD market is is almost impossible manually. Given enough throughput, design, manufacture and test of worth about £120m annually. The need for extensive de-board production is also worth electronic components and the world-wide and is likely to functional circuit boards on troble by 1936 according to Instores, large files of cells (functional inserted automatically by which they were mounted to ternational Technology Markettional eigenit elements) and inserted automatically by

struments, essentially used "cut out to be some 35 per cent per metbods on their annum says ITM. "breadboards" until the Basically, CAD altows designs were perfected. The designers to "compose" their outcome was seldom any more circuits on a screen, with rapid

ture was entirely performed by on.

But the nature of the CAD with soldering irons. Only in the valve industry was much automation apparent. makers had their specialised assembly machinery.

Testing was really a question of old style "troubleshooting" with test engineers poking about in the chassis with meter probes. Component testing was a relatively straight-forward measurement task.

All that was changed by the onset of digitisation and the invention of the integrated cir-cuit in 1960. Designers applied themselves to packing more and more digital circuits into less and less area of silicon "chip" so that, in conventional testing terms a serious difficulty arose: large numbers of previously accessible test points had disappeared into a little black hox about the size of a cough

Circuits became componentsand the nld style companent makers had to think again. Completely new industries were born. Computer aided design (CAD) began to provide much necoed assistance to chip and system beard designers and automatic test equipment (ATE) ance to testing which before long was to become impossible

The designers, with their slide installations; hetween 1978 and rules and basic measuring in-

than a few hundred between computer derived rounds parallel rows of taghoards connections (automatic checks for optimal placing of the items for optimal placing of the items

offerings for integrated circuit tIC) design is beginning to change. For a long time they

> Design and Testing

GEOFFREY CHARLISH

concerned largely with easing the design problems of the big semiconductor companies making standard cir-

Standard ICs however, are now no longer all-powerful in the market place and there is increasing emphasis nn the gate array and custom chip.

In the gate array the semiconductor chip surface is covered with circuit "cells" that can be connected together with applieation — specific tracks to suit the customer's objectives. Some chip however, is fabricated precisely, from scratch, to meet of on to a larger photo-master) the customer's needs; so production runs must he large. Both need CAD simply be-

thousands of active elements on a chip — whole computers in fact — and the task of design

sign rule databases beld on disc automating. For example, the make electronic equipments was ing, the U.S. rescarcb company.

a relatively simple matter.

There are now about 1700 CAD for great precision have all installations; hetween 1978 and meant that computer assistance is unavoidable.

It is unavoidable, too, he-cause of the shortening life cycle of the modern electronic system product. To remain competitive, systems houses need their chips faster than everand this is only possible through

design automation.
The more recent VLSI (very large scale integration) circuits are proving to be something of a problem due to sheer complexity, so that CAD systems concerned simply with the physical layout of silicon may not prove adequate.

Many CAD companies are moving towards systems in which, for example, the tasks are split hetween several work-stations, same working on logic verification and others on timing problems.

Just as much effort is going into printed hoard design systems and there are now about twice as many installed as there are IC systems due to extensive use by equipment makers. Such systems are viable provided that about 50 new hoard designs are performed annually with about 100 ICs per hoard.

After design comes manufacture and both aemiconductor companies and their equipmentmaking customers have employed automation widely. Using equipment mostly made in the U.S., the chip makers are able to directly step patterns on the silicon wafer (instead and carry out most of the subsequent assembly operations under some kind of computer cause there can be tens of control Lead bonding to circuit pads is now no longer a matter of female dexterity in many

TEXAS INSTRUMENTS

Weathering recession

Texas Instruments is the world's largest producer of semi-conductor components. The company ranks second in the production of discrete components with estimated 1981 sales of \$343m and first in integrated circuits with 1981 sales of the order of \$1.400m

Recently TI amounced lay offs of 3 per cent of its workers world-wide, about 2.700 people, mostly in the semi-conductor and personal computer production divi-sions. TI is, kowerer, believed to have weathered the recession better than most U.S. semiconductor producers.

The company has the only major, wholly-owned American IC production facility in Japan where It is producing the bulk of its 64k ram devices. TI has been relatively successful in the 64k ram market, faking about 15 per cent of the market.

The company is an active participant in the U.S. Department of Defence VHSIC (very high speed integrated circuits) programme and is leading the field in the implementation of new autoimplementation of new automated integrated circuit production processes.

TI is by far the largest producer of a wide range of TTL circuits which remain the workhorse of many electronic systems. In the microprocessor area, TI has been particularly successful in the high volume market for low-cost single chip microcomputers that go ioto sorts of consumer products.

Apart from components, TI has large husinesses in calculators, electronic toys and personal computers.

Louise Kehoe



The RAF's multi-role combat aircraft Tornado ond some of its weaponry: big users of electronic devices

Military needs push back the frontiers

MODERN WARFARE—and the development of the necessary weapons to conduct it—has become increasingly orientated towards electronics over the past few decades, and the pace of that development is acceler-

miles out over the North

There is now hardly any single combat arena that does not have its own complex electronics requirements, whether it he for the launching and guidance of underwater longrange ballistic missiles, through the control of auti-tank missiles and laser target range-finding instruments on land, to the acquisition, identification, tracklng and attacking of hostile air-craft thousands of feet above the carth and thousands of

SIEMENS

lines

Product

ripe for

pruning

Germany's giant electrical concern suddenly disclosed

last year that Dr Friedrich

who headed the company's

Baur, the brilliant engineer

ting, the announcement was

from the company that a far-

reaching revision of the divi-

sions operations was under-

Dr Baur was the man who

was widely credited, both

within and ontside the com-

pany, with the successful efforts to develop within

Siemens the capacity to produce integrated circuits, and

so begin to close the gap

which had opened up in the vital field of micro electronic

components between Siemens

and its rivals in the U.S. and

Between 1970 and 1980

Siemens Components Division alone spent some DM 500m

(£117m), of which about

DM 100m came from the West German Government in build-

ing up an integrated circuit capacity. By last year the integrated circuits group in

In fact, according to know-

ledgable insiders, it was not the high technology micro clectronics side of the com-ponents division's business

which was the root of the problem hut discrete components, the other side of the division. Indeed earlier anneuncements about the

rationalisation of the discrete

components business hinted Inevitably in all areas of its

operations Siemens has been tightening its helt and pruning its product lines in order

to concentrate its resources. The components division was making around 100,000

different products and has

been ripe for this pruming

process. Ironically the integrated circuits division within

the group had previously

undertaken just such a

the top executives of Siemens

to tighten up operations and

improve profits that led to Dr Bauer leaving, in spite of his

reputation as a technician

rather than embrace the top

Stewart Fleming

management policy.

rationalisation programme.

own production.

Atlantic ocean.

The range of military elec-tronic equipment is vast, en-compassing not only communi-cations through radios, radars, data transmission systems and other devices, but also to unique items such as "head np display units" to make high-speed air-craft pilots tasks easier, and automatic terrain - fellowing equipment to enable aircraft to penetrate an enemy's defences hy flying beneath his radar

All of this equipment is provided in two broad ways. It is either acquired directly by the armed forces through the Ministry of Defence on the basis of purchases of equipment initially developed by Industry for the commercial market, or tial improvements in this area it is developed specifically for are planned for ships, subthe armed forces in response to marines and aircraft. These precise specifications drawn up include Sea Gnat, a new shipby the forces to meet particular

requirements. The Ministry of Defence each year buys about 20 per cent of the output of the UK elec-tronics industry, and overall spending by the armed forces on electronic and associated equipment was estimated in last year's Defence White Paper (for 1981-82) to amount in about £769m. Of that sum, radio and electronic components account for about £540m, and "other electrical engineering" for about £145m:

These sums cover equipment purchased for incorporation into naval, land and air weapons ssytems, but in addition there are substantial sums spent on research and development. Here, the Defence White Paper is a little vague, defining the ment budget at £1.7bn, of which "other electronics" is given as £259m. It is reasonable to assume, however, that some part of the research and development on guided weapons, amounting to £223m also covers electronics.

In all, therefore, it would appear that something over £1hn of taxpayers money is pumped into the electronics industry annually to meet defence requirements, and this figure seems likely to increase through the 1980s as the complexity of modern farefare itself increases. Much of the work being done

on defence electronics is secret. This is especially the case with guidance systems for guided missiles, while modern military aircraft such as the Tornado and the Nimrod anti-submarine jets have been described as "airborne elec-tronies workshops" in their complexity. Electronic Warfare (or EW

the compenents division was recording annual sales in defence jargon) is a curious world of its own, in which each side constantly seeks to discover revenues of some DM 500m, about DM 300m of which was what the other is up to, so as Inevitably, Dr Banr's departure, coupled with to devise means of countering it, and then to devise further means to counter the counterreports (since confirmed by the company) that the com-ponents group suffered heavy measures—or even to devise methods of countering the counter-counter measures. It losses in 1981, raised ques-It tions about whether the com-pany's ambitious venture in micro electronics was going is this constant updating of what is already being done (often, may it be said, hefore the equipment has even gonc into ser-vice) that accounts for the high wrong, especially since it took place against the background volume of activity in military of a collapse in the world electronics development.

Some examples of what is

covered by security, it is difficult to determine just how much of the work that is done for the military helps in the development of electronic components for commercial use, but it is bound to he a significant amount. With so much money being pumped into the industry militarily, it is inevitable that there will be a major spin-off for the civilian community from defence-inspired technological advances in electronics. Work done on military radio

electronics

systems, for example, such as Ptarmigan, and in such areas as radar, integrated circuitry, and visual display units, is already having its effect in the civilian It is significant that the major

task in EW is to protect its alr-

craft from surface-to-air mis-

siles, anti-aircraft artillery and

To counter such threats, the Tornado in its basic strike ver-

sion is heing fitted with auto-

matic radar warning and jamming equipment, as well as

counter-measures against attack-

ing missiles which are them-selves equipped with such devices as infra-red homing aids.

to enable them to hit the target

with great accuracy.

EW is playing an increasing role in the Fleet, and substan-

borne system for decoying anti-

ship missiles; new shiphoard

Electronic

defence

MICHAEL DONNE

jammers; and new and improved methods of alerting the defending forces. against, impending

studies on every aspect of Elec-tronic Warfare is being under-

taken to help the development

of future equipment, while

existing communications sys-tems for all three armed forces

activity

are being improved.

With so much of th

On the land, a programme of .

air defence fighters.

electronics companies in the UK are all big recipients of military contracts. The last Defence White Paper revealed, for example, that General Electric and Plesscy each received over \$100m for defence equipment in 1979-80 (the last year for which figures are revealed), while EMI and Ferranti each were paid between £50m and £100m, Racal between £25m and £50m, and companies such as Cossor, Smiths Industries, and Thoro Electrical hetween £10m and

Without such inputs of mili-tary cash, and without the challenges of hreaking new ground at the frontiers of electronic technology that the military requirements generate, it would be much more difficult, if not impossible, for the electronies industry to advance at its current pace.

Change of strategy

and Telegraph is a U.S.-hased in its various electronic areas conglomerate whose 1981 sales and can be expected to enter were \$23.2bn, including new areas in the 1980s, although revenues from finance and for the moment the company insurance. electronics components group its core telecommunications accounts for about 6 per cent of husiness and upon various global sales, but some of the operational and software company's other activities, such developments in electronics. as telecommunications equipment, also involve electronics.

ITT's semiconductor group. with facilities in France, the UK, the U.S. and West Germany. claims to be Europe's largest producer of electronic memories. ITT also makes silicon diodes for use in various consumer

It was the determination of electronics applications. In recent years, ITT has acquired two other electronics. related companies in the U.S. Qume, which makes high-speed printers for word processors, and Courier, which makes video display terminals, mainly

TTT is working on a strategy

The company's seems to be concentrating upon

As a major international telex operator through its ITT Worldcom subsidiary, TIT is also trying to pursue a "communica-tions package" approach to marketing, its hardware and coftware services.

In Europe, the company is also a major consumer of electronics components made by others for use in its television, consumer electronics and appliance businesses. Much of this product is now made in Japan and sold in Europe under the ITT label.

Ian Hargreaves



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Today, more and more of the top names in electronics have made Ireland their European base. Apple Computer, Aradahi, Afari, Dataproducts Digital, Ericason, Fujitsu, Measurex, Mostek, Varian and Verbatim are just some of the companies already located here.

The Irish government's industrial development agency has offices in London at 58 Davies St., London W1Y 1LB. Offices also in Dublin, Amsterdam, Paris, Cologne, Stuttgart, Milan, Copenhagen, Madrid, New York, Chicago, Los Angeles, Houston, Cleveland, San Francisco, Boston, Fort Lauderdale, Sydney, Tokyo.

BBC 1

f Indicates programme in black and white 6.40-7.55 am Open University (Ultra High Frequency only). 9.45 The Wombles 9.50 Jacksmory 10.05 The Banana Jackanory. Splits. 10.35-11.00 Why Don't You . . .? 12.30 pm News After Noon, 1.00 Peoble Mill At Onc. 1.45 Pigeon Street 2.00 Men v Women: International Golf Challenge. 2.50 Bugs Bunny. 3.15 Songs of Praise from Wells Cathedral, 3.53 Regional News for England (except London). 3.55 Play School 4.20 Cheggers Plays Pop. 4.45 Jana of the Jungle: 5.05 John Craven's

Newsround, 5.10 Blue Peter. 5.40 News. 6.00 Regional News Magazines. 6.25 Nationwide.

Duck's Easter religion so it is good to see ITV screening One Man's Easter Special (Cartoons). 7.20 Bret Maverick starring James Garner as the

West's most famous gambler. 9.10 Panorama: Searching for the New Zimbabwe.

9.00 News.
9.25 The Monday Film:
"Junior Bonner" starring 11.05 Film 82 with guest pre-senter Maria Aitken 11.38 News Headlines. 11.40 The Computer Pro-

gramme: Machine. All IBA Regiona as London except at the following times:

ANGLIA

ANGLIA

9.30 am Lsrry the Lemb. 8.45 Rocket
Robin Nood. 10.70 Feature Film:
"Please Str." aterring John Alderton
and Caryck Guyler. 11.50 Wattoe
Wattoe. 12.30 pm Jewellery. 1.20
Aoglio News. 2.00 Monday Film
Masines: The Taming of the Shrew,"
sterring Elizabeth Toylor and Richard
aurron. 8.00 About Anglie. 6.30 Movie
Memories. 10.30 Anglia Raports. 11.00
Thriller. 12.25 am The Osvidson File.

BORDER

CENTRAL

9:35 am 3-2-1 Conlact. 10:05 Falcon Island. 10:30 "Jack Ihs Gisnt Killer," etarring Kerwin Malhewa. 12:30 pm Survival. 1.20 Centrel News. 2:00 Killing Time. 12:15 The Monday Scien Matines: "The One That Got Away."

(S) Stereophonic broadcast (when broadcast on VHF)

RADIO 1

S.00 am As Radio 2, 7.00 Mike Read. 9.00 Simon Rates. 11.30 Oave Lee Travis. 2.00 pm Paul Burnett. 2.30 Steva Wright. S.00 Peter Powell. 7.00 Stayin Alive with Andy Paables. 2.00

Sittle Wright. Stylin Alive with Andy Peables. a.u. Oavid Jensen, 10.00-12.00 John Peel in Liverpool (S).

RADIO 2

5.00 am Colin Berry (\$). 7.30 Rey Moore (\$), 10.00 Jimmy Young (\$), 12.00 Gigris Hunniford (\$), 2.00 Ed Stewart (\$); 4.00 David Hebrilton (\$). 5.45 News; Sport. 5.00 Jehn Dunn (\$). 9.00 Folk on 2 (\$). 2.00 Humphrey Lytalton with the Bast of Jazz (\$), 9.56 Sports Oosk. 10.00 Monday Movie Quiz with Rey Moore. 10.30 Star Soond with Nick Jackson. 11.00 Brien Merthew with Round Midnight. 1.00 am

14 3

121 E. E. E.

:0

5.10 Maids the Mad Shooter. 5.40 Hewk of the Wilderness. 6.05 Maggie. mme: Talking to a Paintings.

Sesame Street. 10.35 Occumentary. 11.00 World Famous Fairy-tales. 11.15 Story Hour. 12.30 pm Superstor Profile. 1.20 Sorder News. 2.00 Film: "The Molly Meguires." S.00 Lookaround Monday. S.15 Canon in the Kitchen. 5.30 Cyn. Fletcher in Concert. 10.30 The Monis Carlo Show. 11.30 Ri. Action. 12.15 am Border 10.30 Oregon UXA. 11.30 Ri. Action. 12.15 am Border 12.15 2m The Odd Couple.

6.30 Wings and Things. 6.50 One Hundred Great

S.00 Central News. 10.30 Parents and Teenegers. 11.00 Central Naws. 11.05 Left, Right and Centm. 11.45 Somey Miller. 12.15 am Come Close.

GRAMPIAN

GRAMPIAN

a.30 am First Thing. 9.35 Scoobis
Goss to Hollyvood. 10.35 Stingray.
11.00 Sessme Street. 12.30 pm Survival.
1.20 North News. 2.00 Mondey
Matines: "Gunfight at the OK Corrall."
starring aurt Lancaster, Kirk Oouglas
end Rhonda Fleming. 8.00 North
Tonight. 6.30 Ceuse for Concorn. 10.30
The Mondoy Film: "The Kramlin
Latter." 12.35 am North Hoodlines.

GRANADA

HTV

8.45 am Stingery, 10.10 Sparrow-newks, 10.35 Sesams Street, 11.35 Internstional Bowls, 12.30 pm Mr Speeker, 1.20 HTV Naws, 12.00 Mondey Matinee; 'On the Scat,' starring Norman Wisdom, 4.00 Certeon-time, 6.00 HTV Naws, 10.28 HTV

RADIO 3

**RADIO 3

**8.55 am Weather. 7.00 News. 7.05

Morning Concert. (\$). 8.00 News. 8.05

Morning Concert. (continued). 9.00

News. 8.05 This Weak's Composer;

Chopin (\$). 10.00 Music For Orgen

(\$). 10.30 North Garmen Radie

Symphony Orchestra (\$). 12.05 pm

Music For Voice and Luies (\$). 1.00

Naws. 1.05 85G Lunchtime Concert

(\$). 2.10 Matines Musicals (\$). 3.10

New Records (\$). 4.55 News. \$.00

Mainly For Pleasure (\$). 7.00 Soviet

Life Through Official Literature. 7.45

Penderecki: Performance of, Krysztof

Penderecki: S' Passton and Death of

Our Lord Jeels Christ, according to

6.40-7.55 am Open University.

11.00-11.25 Play School.

†3.20 pm Greta Garbo "Marie Walewska."

awareness and conscious choice.

TELEVISION

Chris Dunkley: Tonight's Choice

week devoted to images of grief. Fifteen more pictures will be featured during the next three weeks, starting tonight with Francis

Bacon's "Three Studies For Figures At The Base Of A Cruci-

fixion." The presenter is Richard Cork. Later in the last of BBC2's series imagined Worlds Dr John Crook discusses evolu-

tionary theory in the light of man's unique capacity for self-

matter of industrial rape seed oil being passed off in Spain as olive oil, with the result that—so far—260 have died and 17,000

more have been poisoned. No cure has been found for what has hecome known as "the toxic syndrome." The job of those attempt-

ing to contain the epidemic is complicated by the fact that none

of the 13 men awaiting trial in Madrid is willing to say how the

expression, non-believers are rarely allowed to broadcast about

tonight and all this week with Don Cupitt, Dean of Emmanuel

College, Cambridge, talking to Marghanita Laski, albeit not until

BBC 2

7.00 News Summary.

7.45 Imagined Worlds.

9.00 The Mike Harding Show. 9.30 Horizon.

SCOTTISH

TSW

7.05 Grand Prix

8.15 Marti Caine.

10.20 Haydn Festival 11.05 Newsnight

11.50-12.10 am Vigil

Despite Britain's theoretical attachment to freedom of

oil came to be adulterated. Each blames the others.

Still on BBC2 Horizon takes up the horrifying and terrifying

BBC2 begins another series of 100 Great Paintings with a

LONDON

9.30 am Cartoon Time. 9.35 Asian Insights. 10.00 Mysteries of Indigo Depths. 10.25 "Bindle (One of Them Days)" starring With Nancy. 11.25 Paint Along with Nancy. 11.55 The Bubblies. 12.00 Cockleshell Bay. 12.10 pm Rainbow. 12-30 Patterns. 1.00
News, plus FT Index. 1.20
Thames Naws with Robin
Houston. 1.30 About Britain.
2.00 Monday Matinee: "The
Battla for Anzio" starring Robert Mitchum and Peter Falk. 4.15 Road Runner. 4.20 The Sooty Show presented by Met-Corbett. 4.45 Murphy's Mob. 5.15 Gazobit.

5.45 News 6.00 Thames News. 6.25 Help! 6.35 Crossroads.

7.00 Natura Watch. 7.30 Coronation Street. 8.00 POSH. World in Action: New

evidencs from the National Instituta of Economic and Social Research showa less than 25 per cent of British industrial workers would be considered qualified by German standards. 9.00 Hill Street Blues.

10.00 News.
10.30 "100 Rifles" starring Jim
Brown, Raquel Welch
and Burt Reynolds. 12.30 am One Man's Easter.

Naws. 10.30 Soac 11.00 Video Sounda.
11.30 The Gmat Osoresaion.
HTV Cymru/Walse—As HTV West
excot: 12.00-12.10 pm Oscw Mam Yn
Dvæd. 4.15 Murphy's Mob. 4.45-5.15
Sår. 8.00 Y Oydd. S.30-7.00 Report
Walss. 8.30-9.00 Yr Wythnos. 11.0011.30 World in Action. TSW Late News. 10.35 Postscript 10.40 Golfing Greats (Gene Sarezen) 11.10 Thuller. 12.30 sm South Was

TYNE TEES

TYNE TEES

9.20 sm The Good Word, A.25 North
East Naws. 9.30 Lional Hudaon Occumentairiea. 10.1S Joe 90. 10.45
Cartoon Time. 11.00 Honnah Barbem
Carteon Special. 11.50 Ssily snd Jake.
12.28 pm Hande. 1.20 Nerth East News.
and Looksround. 2.00 Barson. 2.30
Mondoy Matineo: "Toctor In Love."
S.15 Olffrent Strokes. S.00 North East
Naws. S.02 Mr and Mm. S.25
Nerthern Lile. 10.30 North East Naws.
10.32 Briefing. 11.1S International
Squeah. 11.45 Ther's Hollywood.
12.1S am Four Faces of Holinsss. 9.30 am Kengorooa Can': ae Cornerad. 10.15 Amazing Yeam of Clnema. 10.40 Circus. 11.05 Young Ramesy. 11.50 Welloo Wettoo. 12.30 pm Survival. 1.20 Scottish News. 2.00 Monday Malinee: "Eastar Parada," starting Judy Garland and Fred Astaire. 3.50 Kum Kum. S.00 Seotland Todsy. 4 40 Crimc Oesk. 10.30 Encora st the Edinburgh Folk Festivol. 11.15 Late Call. 11.25 Jeticho.

YORKSHIRE

8.30 sm Sally and Jake. 9.40 Secome Street. 10.40 Wild, Wild World of Animsis. 11.05 Torry Fox. I Had s Oream. 11.55 The Underses Advens Oreem.

s Oream. 11.55 The Underses Adventures of Captain Nemo. 12.30 pm aygones. 1.20 Calender News. 2.00 Mondey Maincs: The Teming of the Shew. S.00 Calender (Emley Moor and Belmont oditions). 6.35 It's a Vat's Life. 9.00 Quincy. 10.30 With a Little Help. 11.00 RL Action. 11.45 Superstal Profile.

12.00 News, 12.02 pm You and Yours

St Luke," part I (S). 8.25 A World of Sinangera, 9.10 Penderacki St Luke Passion, part 2 (S). 10.00 Andres Segova, guiter recitel. 10.25 Jazz in Artain festuring the Stan Sulzmann Quintet (S). 11.00 News. 11.05-11.15

Gax (S).

RADIO 4

S.00 em News cristing. S.10 Farming Week, 6.25 Shipping Forecast. 6.30

Today. 8.35 The Week on 4. 9.43

John Ebdon delves into the 8RC Sound Archivec, 8.57 Wazther, travel. 9.00

Newe. 9.05 Start the Week with Richard Baker (S). 8.00 The Money Box. 10.30 Oally Service. 10.45

The Stranger. 11.00 News. 11.05

The Stranger. 11.00 News. 11.05

Somerset. 11.48 Poetry Pleasel (S). 12.00 News.

12.27 Semi-circles with Paulo Wilcox and Oevid Wood, 12.55 Weather, travel, programme news. 1.00 The World Tone 1.45

The Stranger of the Archives and Oevid Wood. 12.55 Weather, travel, programme news. 1.00 News. 2.02 Women's Hour. 3.00 News. 3.02 Aftermoon Testing forecast. 2.00 News. 3.02 Aftermoon Service and Oevid Wood. 12.55 Weather, travel, programme news. 1.00 News. 3.02 Aftermoon Forecast. 2.00 Ne

Falklands' sovereignty defined

THE WEEK IN THE COURTS

BY JUSTINIAN

FOR 150 YEARS, until last week, Britain had undisturbed occupation of the Falkland Islands, formally establishing colonial government there in 1842. The indefeasibility of title to the island by virtue of that protected occupancy was acknowledged (if acknowledg-

ment were needed) by Saturday's United Nations resolution demanding the withdrawal of all Argentine forces from the islands, Argentina, which has never

abandoned ber claim of sovereignty over the islands rests her casa exclusively on the events leading up to British occupation of the islands in 1833. If that period of the islands' history has any relevance to contemporary claims to sovereignty, the case presents only slight difficulties of both law and fact. International lawyers could assist now by dispelling the notion that there is any validity in the Argentine case, based as it is on tenuoua claims made as a result of

Both Spain and Great Britain asserted title to the islands by discovery, the former through Vespucius and the latter through Drake and Hawkins. The earliest settlement on the islands appears to bave been in the name of France in 1764, whose rights were transferred to Spain in 1767. The islands were known to the French as Isles Malouines (after the sailors who came from St Malo) and as Islea Malvinas by the

events of more than a century

and a half ago.

Spanish.

Between the French settlement and the transfer to Spain, formal possession was taken in 1765 in the name of Great Britain. In 1771 the islands were left by Spain in British possession without any reservation by the Spaniards to the right of

In 1770 a British post was established at Port Egmont, but four years later the British, in their turn, withdrew their forces. They withdrew, however, leaving signs of possession—a British flag and a lead plate on which was engraved the cleim of George III to the territory.

Thereafter the islands went through many vicissitudes of claims to their sovereignty and periods of internal disorder. Spanisb occupetion ensued until 1810, followed by occupation by the Government of Buenos Aires, until in their turn they too withdrew in 1832 under pressure from the British.

In 1829 the Argentine Republic had appointed Louis Vernet, a Hamhurg merchant, as Governor of the islands, with British Government ever the reassertion of earlier acquired sister two seasons ago.

assertion of Argentine authority

in the islands and by the United States Government over the The invasion of the Falkland seizure of its vessels. Having met with no response to the protests, Great Britain interevened and in January 1833 expelled the Argentinions from the islands. Since then Britian bes indisputably remained in occupation with a settler population almost wholly composed of people from the British Isles.

Whather Great Britain could justiy claim hold to the title to the islands during the long period of 60 years prior to 1832 has been the only longstanding question to which international law has never given a clear answer. The question has been largely academic because of the indefeasible title obtained by the last 150 years of un-disturbed occupancy.

International lawyers, however could provide a useful service if they were to pronounca that et no time since dis-covery has Argentina had eny lawful claim to the territory they have so hrusquely seized by force.

The question focuses on the concept of dereliction. Just as sovereignty cannot extend to a terro nullius, so there can be no loss of territory without the intention of ebandonment coupled with withdrawal in fact. A mere hiatus in administration and settlement does not affect the presence of sovereignty.

The starting point is a presumption egainst the reversion from the sovereign status to a status of a terra nullius, a presumption that is not readily rehutted, simply hecause territories without a sovereign, once established, are not only rare but also a persistent challenge to the international

legal order. Where the intention ehandon a territory is clearly declared and unquestionable, then end only then is the presumption rebutted.

international lawyers is that tion against ahandonment and not a presumption against an hiatus of sovereignty when a coment has in fact occurred.

1774 they left the marks of a claim to sovereignty. Had Argentina in this period occupied the islands, she might have gained Governor of the islands, with a good title. But it seems that exclusive fishing rights in 1831 in 1832 the islands were legally Vernet caused three American speaking either British or terra sailing vessels to be seized for nullius. In either event Great sailing vessels to be seized for nullius. In either event Great infringing his orders. Diplomatic protests were made by the ible thereafter. Argentina's

sovereignty is based on a faulty interpretation of international

Islands may have implications for Antarctica. The islands of South Georgia (where recently a group of scrap dealers from Argentina caused a diplomatic incident which prompted the its move on the Falkland Islands) outh Sandwich Islands, South Shetlands, South Orkneys, and Graham Land on the Antarctic continent comprise principally what is known as the Faikland Island Dependencies. The latter three territories come within the geographical scope of the Antarctica Treaty 1959, and territorial rights or claims with respect to them are reserved and

the United Kingdom, and the South Orkneys by Argentina and the United Kingdom. Both coun-tries are parties to the Treaty under which no acts or activities taking place in Antarctica are to constitute a basis for asserting, supporting or denying a claim to sovereignty, or for creating any

rights of sovereignty. No new claim may he asserted while the treaty is in force, and existing rights are preserved. The Treaty has been made part of English law by annexure to the Antarctic Treaty Act 1967. Doubtless, the British Government will be reminding the Argentine government of the rights and obligations that are covered by the

Treaty. Rarely in modern times have the rights under interoational law been so clearly defined in favour of one nation against another; hence the unequivocal nature of the UN resolution.

Whether clarity and certainty of international law on this occasion will have any impact on the defaulting nation remains to be seen in the weeks and montha ahead while Britain attempts to The South Shetlands are reassert its undoubted sover-cleimed by Argentina, Chile and cigoty over the Falklaod Islands.

Classic start

suspended for the duration of the

AT ABOUT the time Mr Dick Saunders and Grittar were setting out to fame and fortune at Aintree on Saturday a different combination, Hays and Greville Starkey, were staking claim to Classics-consideration Salisbury's Downlands Pelting. on

Classic trials on this hilltop course through Go Leasing end Recitation, won as the market

> RACING BY DOMINIC WICAN

suggested he would,

emnhatic style. The handsome Wolver Hollow colt, elways travelling well, swept through from a position on the leaders' heels, approaching the distance to win, going The better view among the away by three lengths from nternational lawyers is that Sahutai. He will attempt to the presumption egainst follow the example set by Reci-loss of sovereignty is a presumptation with a follow-up win in the Poul d'Essai des Ponlains. France's 2000 Guineas.

Just more than an hour before Havs disposed of the colts, Bay Street's halfsister Rose of Montreaux put berself in line for a 1000 Guineans field place with a comfortable victory in the filly's trial.

The Paul Cole-trained

daughter of the Tudor Melody mare Gliding also won by three lengths. She will go for the Princess Elizabeth Stakes at Epsom, a race won by her half-

Rose of Montreaux is topquoted at 33-1 by Mecca for the 1000 Guineas in which she is due to meet, among others, a close relation, the 25-1 chance Glancing, another grand-daughter of the Vilmorin mare

Glancing and the 3-1 favourite Hays, trained by Guy Har-wood, who combined with the 1000 Guincaa without a Starkey to lift both last year's preliminary run. On the preliminary run. On the strength of her startling homework Henry Cecil's Sing Softly continues to attract support. after heing backed down to 6-1 second favourite, for the fillies classic. She reanpears in the Nell Guynn, a race won with consummate ease a year ago by her former stable-mate Fairy

That filly went on to land the 1000 Culness, so the omens look good for Sing Softly, who is likely to face a weak field in the Nell Gwynn, for which Merlin's Charm is the only other definite starter at present.

For betting purposes this afternoon's racing looks trappy, to say the least. Backers could do worse, however, than rely on Gone Sailing and Mailman in the closing events at Chepstow and Nottingham respectively. Both are hy the Irish Derby winner Malacate.

CHEPSTOW 2.45—Maskell Lad 3.15—Portogon* 3.45—Lightening Label NOTTINGHAM 4.30—Naisbapur 5.00—Mailman**

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COMPANY NOTICES

KLEINWORT BENSON (JAPAN) FUND Société Anonyme 37 rue Notre-Dame, Luxembourg R.C. Luxembourg N⁸ B 8.528

Notice of Meeting

Shareholders are invited to attend a General Meeting which will be held at offices of Kredietbank S.A. Luxembourgeoise. 43. Boulevard Royal, ambourg, on April 14th, 1982 at 4.00 p.m. with the following agenda:

Receipt of the reports of the Board of Directors and of the Statutory

Auditor.

Approval of the financial statements and allotment of the results for the year ended December 31st, 1981.

Payment of a dividend.

Discharge of the Directors and of the Statutory Auditor.

Receipt of and action on nomination for election of Directors and the Statutory Auditor for a new term of one year.

Resolutions of the above mentioned agenda will require no quorum and the resolutions will be passed at a simple majority of the shares present or represented at the Meeting. Holders of bearer shares may vote at the Meeting in person by producing at the Meeting a certificate of deposit which has been or will be issued to them against deposit of their share-certificates with Kredielbank S.A. Luxembourgeoise, 43 Boulevard Royal, Luxembourgeoise, 43 Boulevard Royal, Luxembourgeo r Kleinwort, Benson Ltd., 20, Fenchurch Street, London EC3.

Fenchurch Street, London EC3.

Holders of bearer shares may vote at the Meeting by proxy by completing the form of proxy which will be made available to them against deposit of their share-certificates as eforesaid or presentation of their certificates of deposit. Is order to be valid all forms of proxy must reach the company at Kredietbank S.A. Luxembourgeoise or Kleinwort, Benson Ltd, five clear days prior to the

Share-certificates so deposited will be retained until the Meeting or any aroment thereof has been concluded.

Kleinwort Benson (Japan) Fund

Swedish Match

ANNUAL

GENERAL MEETING

Shareholders who wish to attend the meeting must be recorded in the lhare register malotained by the Swedish Securities Exchange Register (VPC A2) not ister than Fiday. April 15, 1582 and mest anothy the Board oil Oirectors all their intention to stread not ister than 4.00 0.m. on Friday. April 23, 1952. The motification of strendance should be malled to: Swedish Match A8, Box 16100, 5-103 22 Stockholm pr by trieohoner Stockholm + 46-8-22 08 20.

NOTICE TO EOR HOLDERS

The Chase Manhastan Bank. N.A. as Dagot. 147 9198: notice that st s. meeting of the Board of Directors of Konshiroku Photo Industry Co. Ltd., it was resolved that a free distribution be made to helders of common shares Y50 each of 1 New Shares held as of record date Aoril 20, 1982. With affect from April 18, 1982. this abstract will be traded ex-capitalisation and also ex the year-end dividend which the expected to be paid by the Company sablect to share-holders approval and which will also be paid 50 of record date April 20, 1982. Cappon No. 10 to the EORs will be used for the ourpose of cistining the free oistribution and Coupon No. 11 will be used for claiming the year-end cash dividend, both Coupons being deemed to mature oa April 13, 1982. With effect from that date, both Coupons should be distributed from siny EDRs presidented for surrender and will not be issued with 240 1982 to 1982.

ART GALLERIES LEUMI INTERNATIONAL INVESTMENT FIELDBORNE, 83. Queens Grove, NWS. 01-58S 3600. PICTURES FROM LONG LARTIN—JIM GILZERT.

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The interest amoustlas to U.SS39.77 per U.S.S1,000 principal amount at the Nobes will be paid on Tuesday, 6th July, 1982 against presentation of Coppon No. 7.

BANK LEUM! TRUST COMPANY OF NEW YORK Princips! Paying Agent

E.B.E.S. **SOCIETES REUNIES** D'ENERGIE DU BASSIN DEL'ESCAUT SOCIETE ANONYME (Incorporated under the laws of the Kingdom of Belgium)

NOTICE OF . EXTRAORDINARY GENERAL MEETING

Notice is hereby given that an Estracordinary General Meeting of the Company will be held on Tuesday. Bith April. 1982, at 11 a.m., at the Resistered Office of the Company. Mechelsesteeping 271, Amwerp, Belgium. **BUSINESS** 1. To increase the Authorned Capital of the

To sustreme the Authorised Capital of the Company.
To Suthorise an Issue of shares for subscription by shareholders. — Price and Terms to be fixed.
To Authorise an Issue of shares for sub-cription by the staff of ERES and INTERESCAUT — Price and Terms to be fixed.

Note Holders of share warrants entitled and wishing to attend or be represented at the meeting should deposit, by Wednesday. The April, 1982, either their share warrants to be are or a certificate of their holden board by their Bankers at Banque Belee Limited.

4. Bishopsetan, London, EC23 a AD from whom further details and aomission cards to the Members are available.

THE BRAZIL FUND S.A. BEARER DEPOSITARY RECEIPTS

BEARER OEPCSITARY RECEIPTS

"BDDS" OF

THE BRA-IL FUNO S.A.

"THE COMPANY
Further to the Notice published on 1st
March, 1982, It is confirmed that an
Extraordinary Conceal Meeting of the
Compary was duly convened and held on
22nd March, 1982 and a Resolution passed
substantinity to the form of the Resolution
set out in the Notice of 1st March, 1982
Sih April, 1982.

Imperial College. Exhibition Road, London SW7 2AZTelephone 01-589 5111 Telex: 261503

OBITUARY

CLUBS

ROCH
On Morth 30th 1982, oearcfully with
his family, Arthur Francis Alexandre,
her 1994, Jafa, Priestrac, Late of
her and Monte Carlo, Befored
hushand on Bothe, Jahns of Alex,
feeding and Monte, and vary apectal
superior and Monte, and vary apectal
generator of Colonal director of
Complex and charman of Eastight
Limited.
Cemasted Friday 2nd April 1982,
Memorial Service Friday 16th April
10.30 am., Church of the Immaculate
Canception, Farm Suest, London, W1,

FINANCIAL TIMES

PUBLISHED IN LONDON & FRANKFURT

Heart Office: The Financial Times Limited, Bracken House, 10 Cannon Street, London EC4P 48Y. Telex: 8954871. Telex: (Advertising) 885033. Telegrams: Finantime, London, Telephone: 01-248 8000. Frankfurt Office: The Financial Times (Europal Ltd., Calolinthett. 54, D-5000 Frankfurt-un-Male 1, West Sermany. Telex: 416193. Telephone: 7598-0. Editorial: Frankmanies 71-81. Telex: 416052.

INTERNATIONAL & BRITISH EDITORIAL & ADVERTISEMENT OFFICES Amsterdam: P.O. Box 12%, Amsterdam-C. Telex: Madridi Esprenceda 32, Madridi 3, Tel: 441 6772.

Madrid: Tel: 276 7%. Madrid: 276 7%. Madrid: 1, Tel: 441 6772.

Dublin: 25 South Proteck St., Dublin 2, Telez: 25434. Tak: Dublin 603378.

New York: EEstartal and Advantising Rockeleier Plaza, N.Y. 20019. Eestartal Tel 65390. Tol: (221) 541 4625. Advantising Tel 238409. Tol: (212) 489 8300. Paris: Editorial and Advertising Centre d'Affaires La Louvre, 156 Rus du Rivoll, 75044, Paris Cesles Oi, Tolon: 220044, Tet: 277 2000. Takya: Edihariai Sib Floor, Hibon Keizai, Shimbon Bubling, 1-4-5 Giamariai, Chiyada-ka, Pare 245 G338. Tel: 241 2920. Advertising, Kasakara Bubling, 1-4-10 Ucbinoda, Chiyada-ka. Telen: 127104. Tel: 295 4050.

For Share Index and Business News Summary, Telephone 246 8026 (number, preceded by the appropriate area code valid for London, Birmingham, Liverprol and Manchester).

How the law is oiling the wheels for women at work

CRAFT apprenticeships have the training sections, and, more long been a male preserve in industry. Clear evidence of entrenched attitudes, according to Dorien Freeman, personnel manager at Vickers Shipouild-ing and Engineering and Eng ing and Engineering, can be been unfounded. Discrimination found in the fact that "fathers only became an issue when it daughters taking up apprentice-shipa at Vickers."

Changes are taking place, however. Today, a total of 80

of the 1,600 apprentices at While the number of female Vickers shipbuilding works at apprentices at Vickers is still Barrow-in-Furness, in Cumbria. Only a trickle, the company ara female. And, significantly, they have bad a salutory effect

further education.

Tha key factor behind this

traosformation has been the UK's equal opportunity legislation. Before the Sex Discrimination Act was passed in 1975 Vickers had no female apprentices in its craft trades except for a few instrument technicians. "Neither management nor the unions would consider the possibility, for example, of women fitters and turners before the Act," says

But with its advent the com-pany had seriously to consider company was both pleased and sceptical at the increased interest for appreoticeships sbown by the local girls." says Freeman. "Pleased becausa it meant that we could meet our required annual intake figures for the first time in a decade. But scaptical because we were unsure of the hoys' reaction to one or more girls in London to try to attract more

research their topics - an

with

who were former shipyard was found that some supervisors workers were probably the most vociferous opponents of their daughters taking up apprenticeship at Vickers."

Changes are taking place, the department's the rest of the department the rest workforce.
While the number of female

appears well pleased with its policies. For strange as it may appear Vickers, tucked away on on male apprentices.

Cases of indiscipline have fallen, says Freeman, and the standard of work and achievement bas risen "appreciably" in the company's training centre and at the local college of further education.

appear vickers, tucked away on the Furness peninsular with a predominantly rural hinterland, has always required more apprentices than thare were local hoys available. Better aducated boys, for example, were positively encouraged not were positively encouraged not to go into the shipyard.

Conversely, more girls in the

area sought employment than there were jobs available so the 1975 Act gave Vickers access to a new pool of talent without baving to resort to any special measures.
Vickers' experiences emerged

at a recent conference on equal opportunities for women jointly sponsored by the Confederation of British Industry and the Equal Opportunities Commis-

Further evidence of the progress being made was illustrated hy the action being takan by the Engineering Industry Training Board on the one hand to encourage women into the skilled areas of engineeriog and on the other to encourage employers to take them on. Six years ago the training board initiated an experiment in the Midlands and south-east



Female apprentices at Vickers: they have had a salutary effect on the behaviour of their male colleagues

female technicians. Since then, has been no serious backlash to be evolutionary—schools the acheme has been extended as everyhody in the industry perhaps now have a more to give additional grants to com- knows that the female intake enlightened attitude towards panies if they recruited girls. is very small in relation to the Some 150 girls were taken on under this scheme last year. For in the engineering indusbringing the total number of women trainees in the skilled grades to about 200 out of a total of 14.500.

There has been little overt reaction to the few positive measures designed to attract skilled women. According to Pennant Jones, bead of research at the Engineering

For in the engineering industry the vast majority of women—some 93 per cent—are still employed in the relatively lowskilled categories. Only 2.3 per cent of scientists and technologists are women, only 2 per one-third of 1 per cent are craft employees.

girls studying the sciences. Of the 476 female engineering trainees in 1980 some 26.9 per cent were scientists and technologists compared with 14.8 per cent of the 9,664 men. In 1975, when there was a much smaller total of women, roughly 11 per cent of both sexes were cent are technicians and only training for these grades. "We are witnessing a swing which is marginally in favour of

A shortage of suitably skilled

labour, particularly in the south east, was the primary reason motivating Ford when, in the early 1970s, it tried to establish the principle of women doing

The conflict between manage-ment and the unions has continued since then with unions at Ford currently objecting to a Health and Safety Executive dispensation to the company on the issue. "An acute recruit-ment problem at a certain time in our bistory was the reason we wanted to introduce women on night shift work," said a Ford spokesman. "There is also the case for equality of opportunity: some women want to do shift work." The denial of the opportunity to do shift work is one of the reasons why the small number of woman shop floor employees earn less than the average at Ford because night shift work pushes wages up hy 331 per cent or one sixth over the two shift period.

Unions like those representing the Ford workers give protective reasons for women not doing night work. Unions bave been trotting these out over the last decade—at their most extreme they allege that night shift work would break up the family unit, expose women to possible hazards from male colleagues and muggers and rapists on their way to and from work.

Tha contradiction is that such reasoning is never applied to work like nursing which is done by women working throughout the 24 hours—something which has always been accepted by nurses' unions.

Change in the main appears women in recruitment although equally evident elsewhere. problems.

the numbers are still very Potential "high fiyers" in The majority of women, how-small," says Mr Jones. banking are also seeing a very ever. like most men, are not small movement towards posi- what personnel officers deem

Jane Adams, career planning adviser of the National Westminster Bank, outlined an experimental scheme being run for the bank's "bigh fivers." the women managers of the future, who also want a family.

Of the bank's 60,000 staff some 50 per cent are women hut they are concentrated at the bottom end of the manage-ment structure. Banking ment structure. Banking enjoys what is called a "progressive age-related managment atructure" and if a person opts out of employment for a few years there ia little opportunity of re-entry except at the lower grades.

women who leave the bank's employment for up to five years and then, if suitable vacancies arise, can re-apply for a job at their previous grade. The intention is that the bank keeps in touch with the women over the out-of-corvice period. over the out-of-service period, through newsletters as well as stipulating that relief work, of a minimum of two weeks. be completed every year.

from employees has been favourable, says Adams. "In tha context of 60,000 staff the scheme is very small. It is for exceptionally able and ambitious women. Most of the Problems for women are staff are sympathetic to their

tive action. The problem does high achievers. A recent survey not arise on entering the profession hat later on when trying to combine career and family in a service whose management atructure is strongly age-related.

commissioned by the EEC Council of Ministers showed rather surprisingly that British working women felt the least disadvantaged of all EEC women in paid employment. One in paid employment. One reason for this may be that more UK women who are in paid employment work in industries that are female dominated. whereas in West Germany, where dissatiafaction was greatest, the opposite is true.

Professor Cary L. Cooper, professor of organisational psychology at the University of Manchester Institute of Science and Technology, who examined that results of the survey, explains that "the segregation of the sexea hy industries in the UK may produce less problems and consequently less dissatisfaction."

The new scheme, emphasises
Adams. is at a very experimental and tentative stage;
it involves a small number of women who leave the bank's opportunities were family commitments, men's attitudes, occumulations of the property of the propert

and less costly access to child minding services, easier access; to joba by returning mothers, better distribution of household tasks and a wage for work done

"Companies and the Govern-ment," said Professor Conper, will have to come to terms with the growing demands of women to work and fashion corporate and political policies to meet

changing social circumstances."

of the Atlantic do not hold the press in much esteem. Recent surveys in both the U.S. and the UK reveal a high land of dissatisfaction with the way business affairs are handled in

both countries, It seems, is one newspapers and on the radin of mutual hostility and suspicion.

In the U.S. the main complaint is that financial reporters do not accurately analysis of six case histories of corporations which were dissatisfied with media coverage and on a survey of nearly 600 chief executive officers, public

by the American Management Associations, was based on an

surprisingly large number of journalists agree. In the UK the attitude relations directors and media towards financial reporting is representatives."

which

The prevailing climate in The U.S. research, conducted

Publish—and be damned

According to the research, better knowledge of aspects ciate deadline restrictions and critical, although accusations of U.S. financial journalists also such as balance sheets, the did not understand the term inaccuracy are not as wide-agree with the criticism that general practice of manage—"off the record." sloppiness," rather than hias.

inaccurate reporting is due to ment, and the stock market.

In their apparent defence, fewer than half of financial as accessible as they should be reporters understand the workings of business, a majority of stand the workings of the journalists themselves media. For example, husiness-

Most of the U.S. reporters felt that businessmen were not While three-quarters of chief financial journalists felt that entirely honest with their own financial journalists felt that entirely honest with their own financial fewer than half of financial acceptable as they should be and roughly a third said that and roughly a third said that husinessmen often lied to

admitted that they should have med, they said, did not appre- towards the media are equally 800 companies made by the UK

earth

satellite

aerials

Telecom

for

of Britain's top businessmen consider business reporting to be generally accurate with another third describing describing " acceptably

These are the conclusions In the UK business attitudes from a survey of executives in

coverage

monthly magazine Executive.

The top husinessmen complain that much of the media coverage on business issues displays a total misunderstanding of how industry works. They also say that too much atten-tion is paid to industrial giants and not enough in "ordinary"

Around two-thirds think that an unequal amount of space/ time is given to trade union

Their other complaints are: There is too much concentration on bad news;

be ignored or played down; Journalists selze every opportunity to "knock" British

products: • It is taken for granted that British companies are less efficient or less progressive. than foreign counterparts.

* The Business-Media Relationship, ovailable from Management Centre Europe, Avenue des Arts 4, B-1040 Brussels, Belgium, price \$10, or American Management Association, Amacom, 135. West 50th Street, NY 10020, NY, U.S.

Arnold Kransdorff

BUILDING AND CIVIL ENGINEERING

Europe-Africa link project

Gibraltar to link Europe with the impact such an amhitious Africa represents the latest plan would have on the two development in a dream which continents has now arisen and goes back to 1869. If it comes taken on a new topicality. true, the scheme could make Onlinists see the

headed by Mott, Hay and Anderson International, the Croydon-hased consulting engineers, and including INTECSA of Madrid and five Rahat and Casablanca-based Croydon-hased companies. It was awarded by

The decision follows shortly on from Morocro's announcement of a feasibility study to examine the prospects for a mythology of parmanent links fixed link to join the two continen's. The study contract went generating passenger and to a French-Spanish-Moroccan freight traffic: to the political consortium while another to problems of the instability in design a suspension bridge. African atates along the feeder went to a consulting engineer routes joining the link at ing consortium comprision Free-Tangier, the prospect of states man, Fox and Partners of Lon-holding the link to ransom at don, EYSER of Madrid and any time; to the nebulous bene-IMEG of Rabat

Alternatives

Although the fixed-link, if justified on economic grounds, will prohably be a bridge or bored tunnel, the possibilities of a suhmerged tube or causeway are being considered. The strait is 15 km at its narrowest but the link would probably follow the shallowest route at depths of 200m to 350m along a 28 km line hetween the headlands of Paloma in Spain and Altares in Morocco.

Spain seeks design of a railonly tunnel, which could carry

vehicles and obviate the need for ventilation shafts interfering with navigation and the ecology. Morocco and Spain are cooperating to study and promote the link under an accord signed by King Hassan and King Juan Carlos at Fez in 1979. In a 1979 report, an International Road Federation working narry estimated construction costs of the maned construction costs of the mane than a second construction costs of the final recommendations after project would be more than S1.25bn (£694m).

A suspension bridge for the Gibraltar link would advance the frontiers of engineering achievement. Including, probably, spans between 2 km and 3 km long.

The feasibility study covers physical reconnaissance of the -the British colony of Gibralstrait, technical studies for a tar, standing about 25 km from bridge or bored tunnel and economic studies to permit a Ceuta peninsula. For Morocco broad analysis of possible solu- wants the project evaluated on tions to pick one proposal for both an immediate basis and in eering and political challenge deeper examination.

gested a link could be in service Wast African trunk routes.

THE AWARD to a UK-led consortium of a design contract for some preliminary designs get in the light of the Rabat-a tunnel beneath the Strait of underway, the wider issue of Madrid-Paris axis and the ind-

Optimists see the link The design contract was last mooth awarded to a consortium headed by Market Track of the North-South dialogue, exchange involving Europe's technology for Africa's raw materials and, in association with the United Nation's Decade trans - African and 1978-88 regional highways plans opening up landlocked African states and encouraging regional and international trade.

Pessimists point to fits that may arise from the ultimate creation of African



trunk routes: and to the attitude of maritime nations 60,000 of whose vessels, including war-ships, annually traverse the

October because the critical issue of economic feasibility may prove a more daunting ohstacle than political problems.

There are signs, however, the project may become more than mere levanter blowing between the Pillars of Hercules the link's probable site, and the respect of the distant future through to a successful con-Moroccan sources have sug- when the link might be fed by clusion.

disputable fact that France and Spain are its largest trading It appears the technical prob-

lems can be overcome. Matters of jurisdiction, weather, winds, tides, tectonic activity (the 1960 Agadir earthquake disaster was followed by damaging regional rumblings in 1968), geological complexity and even the greatest problem —depths—can be handled, though no marine boreboles have been commissioned.

Economics

It is the economic problem that is critical and there are fears of a white elephant which might not create an adequate in the short term.

Also promoting the link is VENESO, a Clermont Ferrandbased group lobhying for creation of a European highway from Amsterdam and Eastern Europe to the strait.

Others, however, notably the majority of the International Critical Road Federation working party set up in 1977 and which reported in 1979, concluded there look at was no justification for the link at present.

They believed no commitment should be made until five-yearly surveys to the year 2000 had been made of trans-Mediterraneao ferry-borne vehicular traffic. They suggested related road networks be improved and additional marine carriers across the Western Mediterranean be provided if inter-continental vehicular traffic justified expansion meanwhile.

Trans-strait traffic entering and leaving Tangier and Ceuta in 1978 totalled 3.5m passengers and 318,545 accompanied wenicles. The threefold increase in vehicular traffic ferried across the strait in the nine years to 1978 had been, however, " by no means stable."

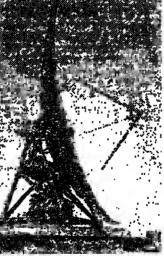
Proponents of the link point to the record of a similar scheme: the Bosphorus bridge saw a near-threefold increase in traffic in four years. The hope is a Gibrakar link

would repeat the pattern,

though it will require a great

deal more than sentiment to see such an immense civil engin-

ALAN ELLIS | Hermann Bondi.



Civil engineering for two earth satellite communication aerials is to be carried out for British Telecom by IDC Group, Stratford-upon-Avon. The naw aerials, to be erected at Madley, Herefordshire, upon-Avon. The naw aerials, to be erected at Madley, Herefordshire, will be used to bounce international telephone calls off satellites in geostatic orbit over the Atlantic ocean and Europe. One will also be used to carry European Broadcasting Union (EBU) television transmissions. Each dish-shaped aerial will weigh 138.7 tons and measure 62 feet in diameter. Design and construction of the airconditioned ground equipment halls and power rooms needed for each aerial is also being carried out by IDC. Completion of the contract, worth £1.6m. is expected in June next year. Our picture shows one of the similar existing aerials at Madley, for which IDC was also resmostible.

Severn barrage

A MEMBER of the Government's Building Research Establishment has cast doubts on whether construction of the proposed £5.6bn tidal barrage across the River Severn could ever be justified, given the likely cost overrun of the scheme.

Dr Stephen Wozniak, head of

tation auch as the Thames Barrier and Concorde," said Dr Wozniak.

to instal solar energy in half the homes in Britain. The relative costs can't have changed that much and mass market aolar systems are still some way from being viable," he added. Dr Tom Shaw, McAlpine's

expert on hydraulic and offshore engineering, said that economics was the main reason the BRE's Solar Technology to consider going ahead with Programme, said the impost the harrage. "At £900 per sibility of building a full scale kilowatt installed capacity the model to test the proposal was costs are roughly the same as one of its major disadvantages. those for a pressurised water His remarks last week at a reactor nuclear power station," conference of the Concrete He added: "The resource can Society Wales Region at be captured at a reasonable Newport, Gwent, on the con- price and it remains to be aeen struction industry's role in bow it would fit into the were directed at country's economic strategy." members of the Sir Robert Mr Clare agreed that it would McAlpine team carrying out take a couragaous government research ioto the project to commit itself to the scheme. They came at a sensitive time. The barrage Committee re-

"We have already seen axamples of huge cost escalation on projects that could not he tested hefore implemen-

"When estimates for the Savern Barrage stood at £2bn I worked out that it would cost roughly the same

with the Department of Energy commended last year that expected shortly to make a further studies should be statement on the pre-feasibility carried out into the feasibility study prepared last year by the of a structure running about Severn Barrage Committee eight miles between Lavernock

under the chairmanship of Sir Point and a point near Weston

Supar Mare.

Prisoners should make small doors

PRISONERS in British jails are producing some 1650 doors each week. This has incensed the open market; and a mora-British Woodworking Federa- torium on the release of several tion, which says that hecause thousand doors which it of the continuing recession the believes are held in stock. of the continuing recession the UK door industry has been hard thit with widesoread redundannies and the threat of further of f cies and the threat of further

To be fair, the BWF originally accepted limited manufac-turing of doors within HM Prison Establishmeots to assist in the rehabilitation of prisoners. At that time demand was outstripping supply.

Now, the BWF has written
to the Home Offica requesting
a temporary total suspension of

the manufacture of hardwood exterior doors: cessation of

(the Home Office organisation responsible for prison industhat it is insupportable to keep prisoners working at the expense of BWF members employees.

Being constructive the Federation has suggested that prisoners should he switched to making kitchen cabinct doors, moat of which are imported.

TONY FRANCE

UK CONTRACTS

The site of 6.75 acres is in side of the roof and will accommodate high bay storage racking modate high bay storage racking a 200,000 sq ft dapartment store for Ailders, a 30,000 aq ft fashion tract to build homea for elderly store and about 75 unit shops on two levels. Two office blocks totaling 121,000 sq ft will pro-vide accommodation for multi-

oational companies as well as smaller businesses. A 1,000 vehicle car park will be incorporated in the scheme. Principal shopping provision
will be provided in the main
mall, aome 413 ft in length, in
the form of a multi-tiered long
gallery, comparable in style to
the integrable provided in the main
the form of a multi-tiered long
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the integrable because Potent
contract which is being a faithful to the construction of

The entire scheme will be funded by The Norwich Union Insurance Group, at en estimated cost of £50m.

Bovis build for Boots

MANAGEMENT contract worth around £8m to build a

£25m Basildon scheme JOHN LAING CONSTRUCTION
has been awarded the £25m contract for construction of Phase II of Basildon Development Corporation's Eastgate Shopping Mail. The site of 6.75 acres is in the heart of the existing Basildon modate high bay storage racking tracking Contra and will consist of tract to build homea for elderly people at Nuns Road, Chesiar. The contract for the Methodist Homes for the Aged, will com-prize 37 flats plus specially equipped accommodation for 15 frail persons.

the internationally known Eaton contract which is being carried out by KYLE STEWART. Instart soon and completion is due at the end of 1984. out by KYLE STEWART. In dwellings at I cluded in the cootract are four for the GLC.

> CROUDACE CONSTRUCTION has won a £8.7m contract for 205 dwellings at Gasson Wood Road, Dewbush for Crawley Borough Council. The contract is for 109 two-storey houses and 96 flats to 2/3 storey blocks in traditional construction. Work has started and is due to be completed in

A DESIGNand construct contract warehouse for Boots is being valued at ahout £2.9m has been carried out by BOVIS CON-struction and is due for completion in Spring 1983. The pletion in Spring 1983. The warehouse will form part of computer company, Systime, Boots' distribution complex at of Leeds.

A DESCRIPTION and three-bedroomed Novo-home, plus brand new Unifiat units which come completely furnished and equipped almed the new factory and admin offices at aingle people who prefer to own rather than rent accommodation. valued at about £2.9m has been homea won by ROSSER & RUSSELL units



£15m for

FOLLOWING the demolition of a multi-storey car park in Upper Thames Street, London, between Swan Lane and Angel Passage.
SiR ROBERT MCALPINE &
SONS is to huild a 10-storey
office block for the Edger Group
of Companies, which are whollyowned by the Prudential, under
a film contract

a £15m contract. Measuring 84 metres by 46 metres on plan the granite and precast concrete clad building will incorporate a car park. Fully air-conditioned, it will include a private access roadway and a terrace to its River Thames frontage. Completion is programmed for mid-1984.

23STURIL

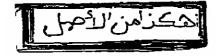
UNITED KINGDOM Oil Pipelines, through managing agents, British Pipelina Agency, has awarded a contract, worth over \$4.5m to McALPINE SERVICES & PIPELINES (a membar of the Sir Alfred McAlpine Group). Work involvas construction of 143 kms of 10 inch diameter pipe-line running from Kingsbury. near Tamworth, Staffordshire, to Buncefield, near Hemel Hempstead. Hertfordshire. It is ex-pected that work will be completed by the end of October

seven two-storey blocks with 67 dwellings at Poplar, London, E14

shops, community hall, petrol station and parking facilities for over 600 cars.

Other building work is for Elmhridga Borough Council for a housemother block of 31 old people's flats and another aight-flat block at Weyhridge, and Hillingdon Borough's improve-ments and repairs to 44 dwellings at Yiewsley, Middlesex.

> LEECH HOMES has just started on a £2m 100 new homes scheme at Leman Street near the centre of Derby using the company's "Country Style" concept. Tho units will be in a variety of one, two and three-bedroomed Novo-



more rugged and retirent indi-

vidual in the novel. Snow had observed the top brass of the

police world at close range before he died, and had the

highest admiration for them.

He would have smiled wrly at

antagonists are worthy of him.

They are none other than

Michael Denison, as a former

member of the secret service

(as Apostle, naturally), and

Anthony Quayle as the old

lady's doctor. Both are in good form. Mr Denison makes the

switch from friend to suspect admirably; and Mr Quayle brings out the complex drives

of a most aingular physician in a manner which one feets Snow

would have applauded. The lively octogenarian victim is

Dulcie Gray who thus has to

spend much of the evening as a

corpse gnawed by maggots.

Fortunately, the author brings

her back after the interval in a flashback scene that smacks not

so much of Snow as Patrick

At any rate it leaves ua with

vivid impressions of Miss Gray to put beside the other minor

performances, Suzanne Burden

aa a chirpy Sloane ranger, and

Simon Shaw as her elusive regimental boyfriend. Finlay

James has designed a setting

affluence in which these folk

operate pretty well. Mr Quayle

performers directs the balance

of the production goes out of

here. This is one of the

smoothest evenings in

Hamilton.

Mr Barkworth'a

Mr Barkworth.

La Ronde

by MICHAEL COVENEY

Shared Experience of Arthur the House and the Housemaid Schnitzler's sexual merry-go are seen polarised by shyness round is the third this year (the before abandoning the pretence copyright expired on January 1) of cat-and-mouse over a glass of and the first to convince me that the plece is worth doing. The Drill Hall in Chenies Street is an unkind, cavernous venue, the seats the most uncomfortable in : London. But the production is quite outstanding, the best I have seen from this company since their Arabian Nights and the most joyfully erotic show on : the British stage in a long, long

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Throughout last week the feeling grew that I was trading ln my job as the FT's theatre critic for that of sexual affairs correspondent. There was Arden of Faversham and Macbeth in Stratford, La Ronde, and finally Lady Chatterley's Lover in Coventry (to be discussed to-morrow). Odd man out in these tales of passion is the Schnitzler. Passion on the grand scale with catachysmic social consequences characterises the other three shows. In La Ronde, we have a series of clinical, glancing examinations of the small change of sexual manners. In cinema bedroom scenes, you may see the lighting of a post-coital cigarette. But I cannot recall everseeing anyone reach for the Kleenex, struggle with corsets or fiddle, with buttons.

In the course of ten short scenes, Schnitzler makes paintimes be odorous; Indl Dench
fully recognisable drama of the
embarrassment of teutative reflecting on the vitality, range
seduction, the ignominy of furand authority of this exceptive congress and the desolation tional actress.

Mike Alfreds' production for of hollow farewells. The Son of water and fumbling clumsily on the floor. The scene is hilarious because of the banal commentary of the participants — "Blue shoes!" exclaims the boy on lifting a forest of under gar-ments. "I'd like to see you again, every so often "murmurs an adulterous Husband to the girl he bas seduced in a private

> Mr Alfreds' brilliant idea is to have all ten lovers played by the same two actors. Their quick changes, sometimes be hind screens, sometimes in full view, are accompanied by the strikingly appropriate sound-track of Ilona Sekacs, which is the musical equivalent of rancid fruit. This device gives an extra dimension to the play's obsession with costume and how to get out of it. It also gives the actors a great opportunity to investigate an endless variety of tonal gambits and strategies. Jonathan Hackett and Pam Ferris seize on this opportunity

with ferocious élan.

Mr Hackett is particularly good at studied shyness and oumptious vanity; while Miss Ferris, whose performance must be one of the best on the London stage, has a terrific line in baughty independence. Com-parative compliments can some-

Westminster Abbey

Walton's choral music

by RONALD CRICHTON

numerous other. British com- used for "Where does the posers before him, Walton was uthered music go?" (St a boy chorister. His two famous Sepulchre's Holborn, 1946) in predecessors belonged to the spired him less readily than the Chapel Royal, Watton to Christ Auden text for "The Twelve," Church Cathedral, Oxford: That written for his old choir in the experience marked him Oxford nearly 20 years later, durably was shown in the pro- surely one of the most felicitous gramme, drawn from bis of his post-war works. The smaller choral works, which he Coronation Te Deum came up attended in person at the Abbey brightly in an arrangement by on Friday evening an occasion Simon Preston for choir and which may linger in the organ, the spiralling major triads on "praise him" given distinctly than some of the larger and louder 80th birthday jubilations. The performers in the sbort time he has been were the Westminster Abbey there, Simon Preston has Choir under their director brought the Abbey choir to a Simon Preston, with rare pitch of excellence. The Christopher: Herrick at the

of 1938, all the music was postwar. Yet the persistence of moved, for the unaccompanied feeling for choral rextures, the pieces, towards the High Altar. justness of accent and the ease. Christopher Herrick accom with which words are set to panied and on his own contri-carry in resonant spaces, is con-buted three organ pieces, spicuous. So is the way in which which turned out to belong to the English tradition that tends the film score for Richard III. It to blandness receives from time 'is essential that the general but to time gentle electric shocks not churchgoing public should from Waitonian finger-prints of

of equal value. The Magnificat and Nunc dimittis written a few years ago for Chichester made a scrappy effect. In the Gloria of the Missa brevis (Coventry, 1966) one had the feeling of the wrong end of a telescope, and here felt inclined to echo conventional complaints about Waiton's "failure to develop." Walton is sensitive to the words ended last December.

Like Purcell and Sullivan and he sets. The Masefield poem

Except for the very youthful attack, intonation and diction, are as a seal upon thine heart" choir stalls, sounding limited to the control of 1938, all the much are as a seal upon thine heart. know what fine music is still, in rhythm or harmony. spite of endless difficult Not all the music heard was made in our great courches. spite of endless difficulties,

> Arts Council appointment

The .Arts . Council has looking at Belshazzar through appointed Marghanita Laski, the wrong end of a telescope, the novelist, critic and broadcaster, as its vice-chairman. She succeeds Dr Richard Hoggart, whose terms of office Museums

Casting a net

by GILLIAN DARLEY

encouraged towards a passive lit galleries for all to sea. state of mind. Experts bave made selections, information is play. Lighting is frequently used editorially so that certain angles and aspects are emphasised, others obscured. Interpretation has become the key word. At best these methods lead to the lively and informative exhibition, at worst to the strong feeling that a kind of intellectual censorship has been imposed, aided by a stereotyped

taste, which is neither illuminat-

ing nor interesting.
Nothing could be further from the attitudes that the Victorians brought to the display of museum collections. They were, of course, primarily teaching aids in the widest sense. Students of any age could visit the world within the course of a long afternoon at South Ken a long afternoon at South Ken-sington and it was in the col-lections of casts taken from the sculpture and architectural oroament of a wide range of cultures that the raal didactic purpose of the exercise was revealed.

From the Great Exhibition oncollections, such as that amassed coln'a Inn Fields, were rich in casts of classical details or Gotbic enrichments but their shadow. circulation tended to be conarchitecture and sculpture.

unlikely to come their way,

well deserves the support such

as it may be, received from

Westminster Arts Council and

the GLC. On Thursday this intelligent and versatile body

gave the first staged per-

formance in Britain of the

Swiss composer Frank Martin's

Le Vin herbe, a setting for 12

of excerpts from the Roman de Tristan et Iseut, a conflation by

the French medievalist Joseph Bedier of varous versions of the

Tristan legend. In scope, style,

story details and musical lan-guage Le Vin herbé is as different as could be from

Wagner's overpowering master-

piece. Martin sagely and grace-

Should the result be treated

fully sidesteps comparisons.

Festival Hall

New Theatre, King's College

their teeth into music otherwise 'oratorio" and lists it under the

The modern museum visitor is in two vast purpose-built, top-One of these two Courts bas just been reopened to the pubproffered and the design tends lic after lengthy works which to support a particular way of have included the repair of the looking at the objects on dis- glazed roof and restoration of the original Pompeian colour scheme of terracotta and green, based on scrapes from the 1870s frescoed walls.

> This Court, containing all but the Italian Renaissance casts which will be displayed in the room beyond, opening next year. provides an extraordinary whiff of Victorian historicism. It is a kind of three dimensional version of the encyclopaedic works on oroament that began with Oweo Jones' Grammar of Ornament and proliferated, as text books for designers, until tha

1890a.
Two things stopped the potentially endiess source of material that might have filled the V & A to the roof with casts of every period and style. One was a shift in taste and a change in emphasis, exemplified on the one band by Enropean Art Nouyesn and on the other by the Arts and Crafts movement bere and in America.

The second was a sudden realisation that the process of wards public access to such taking casts had a detrimental might be collections was taken for effect upon the works concerned granted. Before that private — tearing off fragments of paint II is, and damaging surfaces — as well as an ethical objection, by Sir John Soane in his many- well as an ethical objection, celled treasure house on Lin- hased upon the feeling that the original of a work was a peer-less object, a copy a lifeless

To visit the Cast Court, and fined to the practitioners of the passage alongside which contains an intriguing collection With the opening of the two of reproductions, fakes and pre-World War I standpoint, great Cast Courts at the Victoria forgeries, is a revelation of the Above all, the Cast Court and Albert Museum in 1873, the high Victorian aesthetic sense. demonstrates an attitude which should produce a conversion, treasures of Liege and Santiago. The setting, the choice of the Victorians demonstrably confirmed by a s Rome and Nuremberg, jostled objects and the skill with which eojoyed and which we, equally to the V and A.

Viva's programme said "dramatic dratorio." Paul Hernon's imaginative staging in



هكذامنالأجل

A watercolour (c. 1875) of the Cast Court, looking north, showing

the casts assume the veneer of stone, bronze or whatever the losing. The apirit that these original material in question might be, is remarkably illumi-

display which illuminates the history of museum display— rather than the practice of architecture or sculpture. Although it atill functions as a teaching aid, it is for art historians and not for designers

Above all, the Cast Court

Opera Viva for taking the risk.

as chorus and as soloists,

mingling narrative and commen-

long text for two performances, executed their constantly changing, often striking groupings with a fluency denoting careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal. To those in much narration clear words are the careful rehearsal that the chorus. The other musicianly but projected too gently. Some of the shorter roles were vividly done—I bope I correctly identified Casey.

the audience who came unpresental: The level on Thursday Park as Tristan's friend was good in most of the solos Kaherdin. There was generally may bave proved austere and baffling. Until Le Vin herbe choruses, but it would be untrue a sour note, but in this unattrac-

(the drugged wine) becomes to pretend that comprehension tive bunker-theatre either a

more familiar-il made an was total. The decision to use projector or the ventilation

impact in the years after the English was right, yet French system was making an war but was eclipsed by more properly declaimed would cut abominably distracting whistling

An alternative 'Tristan' by RONALD CRICHTON

Opera Viva, offering young as an opera? The score bears experiments - concert per The score has Martin's usual

singers and the more enter no description. New Grove formance may be the safer restrained distinction—partly prising public a chance to get describes the work as "secular choice. Praise, all the same, to serial in his own way, subtly

composer's choral works. Opera Martin uses his singers both

Hernon's imaginative staging in tary. Only Tristan and Isolde simple black robes and white (Citton. Helbwell's' English half-masks, in lighting by translation employs the Wagner-Graham Walne, was most commendably carried out. The singers, who had memorised a at moments they too slok back long text for two performances.

obviously radical music theatre through more easily.

Ashkenazy by DAVID MURRAY

There was much to be addressed himself to a musichox. Perhaps the sixth by a relaxed rhythm and a admired in Vladimir balf-dozen Skryahin miniaturea Sonata lost something by affectionate liberties, too; there was "Scarbo," in which Ashkenazy

less to excite: can the piano was not only soft but opaque: little tension in its syncopated was briliant with the toccata-

values of our society. This is a false premise Ithere were demonstrably, are in danger of galleries recall is one of sheer curiosity; they cater for the enquiring mind which, in modern display technique, is often forgotten. It becomes harder, year by year, to find the museum where the visitor may burrow and dig rather than simply "he told."

It is an emphasis which many curators and designers would and, even then, the historic do well to rediscover if they perspective is one seen from a feel that these are the words of a sentimentalist, then a visit to Sir John Soane's Museum

expressive, with more contrast

of mood and colour than the

limited means suggest, the

episodic narrative sustained by

strong musical architecture.

Leslie Head conducted. Timothy

Dean who had coached the

performers, played the con-

siderable piano part. Virginla Browning and Kenneth Brown as

the lovers were reliable and

noise.

really matter from a theatrical point of view that he has been theatre to be inspired by the upgraded in the aocial scale, work of C. P. Snow.

Hampstead

for eloquence.

Haymarket

night in her house in Bel-

gravia. Everyone who might

gain financially is rich already.

And yet, unless the crime was a complete acte grotuit by an

outsider, someone in her imme-

diate circle-an old friend, a

uephew, his fiancee, her doctor,

must have done it. But why

C. P Snow posed this conun-drum in the last novel he wrote

pefore he died. He left the

answer open-ended and sug-

gested that the crime was a

sudden insight into the sense-

less violence that Ites below the

surface of modern life. He was

fascinated by the methods adopted by the police, the cameraderie of the investigat-

ing team in their "murder room," the prolonged contest

between their skilla and the

fortitude of the man they know, but cannot prove is the

Much of this is caught in the

play now made from the novel

by Ronald Millar. He goes a little further than Snow, suggesting that the murder ta

an indication of the decline of

plenty of brutal domestic mur-

ders in the good old days of the British Empire), bul like

many false premlaes in the

thealre, il provides the actor

These opportunities are seized

Yard in charge of the case. He

gives a strong, dominant and

a delight to watch. It does not

... why:

A Coat of Varnish

by ANTHONY CURTIS

An old woman is brutally and given some true blue sentidone to death on a summer's ments to go with it, from the

Meetings

who airs it with opportunities that enshrines the tarnished

with both liands by Peter Bark also directs. The saying that worth playing the man from the when one of the leading

sustained performance that is true certainly does not apply

Mustapha Matura crams three plays into ooe, and offers an enjoyable, well-acted mess. domestic comedy Bright stumbles into serious social comment, swelling to an expose of nasty business methods in the Third World. This area of

Our laughter at first is breezy fully orgasmic appreciation to and innocent, so that the en-dis new routine of corned-beef croaching serious vein is hard dumplings, salt fish, breadfruit. to stomach. After auspicious and so forth, beglooings, the unbappy outfor tobacco. Yes, this is also

Jean. They live oo a diet of take- the talented Angela Wynter; a away chicken and chips; she is comparative newcomer. far too busy launching a new backdrop to an accolade to the thought. less to excite: can the piano was not only soft but opaque: little tenaion in its syncopated have been at fault? At the towering climax of Skryabin's too often hazed over.

"Scarbo" the sonority was disappointingly meagre, and in Mussorgsky's Pictures from an Exhibition — where sustained grandeur is a necessity—

Mas briliant with the toccatamentifs, and it had the sir of a fiftul improvisation, though a final turns of the screw (and the most cultivated one.

Still, what one could perceive of those epigrammatic pieces and played with marmals of the screw (and the most cultivated one.

Ashkenzy's celebrated mais f, was delivered without recording of Ravel'a Gaspard de finely shaped. I doubted only in nuit set a standard not the tender rubato Ashkenzy equalled in this performance.

The proposed of the sories in the piano material, didn't bring off the fitful improvisation, though a final turns of the screw (and the most cultivated one.

Ashkenzy's celebrated mais f, was delivered without recording of Ravel'a Gaspard de finely shaped. I doubted only in nuit set a standard not the muting pedal). As for the prictures, they were sketcby: against Ashkenzy's poignant with marmals and material, didn't bring off the fitful improvisation, though a final turns of the screw (and the most cultivated one.

Ashkenzy's celebrated mais f, was delivered without the muting pedal). As for the pricture, they were sketcby: against Ashkenzy's poignant of the most cultivated one.

On the fitful improvisation, though a final turns of the screw (and the famous last threat, "sourdine mais f," was delivered without the muting pedal). As for the most cultivated one.

On the fitful improvisation, though a final turns of the screw (and the famous last threat, "sourdine mais f," was delivered without the muting pedal). As for the fitful improvisation, though a final turns of the screw (and the famous last threat, "sourdine mais f," was delivered without the muting pedal). As for the famous last threat, "sourdine mais f," was delivered without pestle and mortur, and the clay

With true stage luck, Hugh meets an old mango seller, a countrywoman who knows the traditional ways. Conveniently. she has a daughter, Elsa, an excellent cook, who needs work. Elsa's arrival necessitates a investigation remains cursory, guided tour and some lovely while, with some contrivance, it comic moments—like meeting is balanced by a bewildering the electric mixer. She soon the electric mixer. She soon paean to Creole cookery and starts cooking, and Rudolph the cult of Voodoo. Walker's Hugh brings delight-

Both the development and come left me untouched by any interplay of character are thing more than a mild dislaste eleverly wrought. Corinne Skinner Carter carries a classy, an anti-smoking play.

Set in present-day Trinidad, of her busband's forays into the title refers, primarily, to past and she throws out some the professional engagements of nicely-aimed darts at the innoa well-to-do couple. Hugh and cent, young domestic, played by

Despite an over-ambitious brand of cigarelles to waste time package, and exaggerated mood over meals. "This kitchen has swings, Matura, who also everything but food," comments directs, has brought a welcome Hugh, eyeing their built-in novelty to London following its luxury: Optimat Kilchens premiere at the Phoenix supplied the lavish equipment Theatre, Manhattan. It is ultifor Peter Hartwell's swanky mately a failure, but the best design. They might have been sort of failure, noe which less generous if they had launches adventurously into realised they were providing the relatively unexplored areas of

ROSALIND CARNE

act opera The Soint of Bleecker

This "drama set in contemp-

Menotti premiere for Bristol Bristol Opera Company bas announced as its 1982 produc-(the libretto is by the composer) tion the British atage premiere of Gian Carlo Menotii's threenext year The Soint won the Pulitzer Prize for music:

The Bristol dates are Wednesorary New Yark" received its day to Saturday. April 28 to world premiere in that city in May 1, 7.30 pm at the Victoria 1954, winning the Drama Critics Rooms, Clifton.

THEATRES



20VENT GARDEN. 240 1006. S. IGardencharge CC 836 5003.) THE ROYAL BALLET Ton't at 7.30. The Dyeans. Science de ballet. Gloria. Tomor, Wed & Sat at 7.30. The Sleeping Beauty. THE ROYAL OPERA Thurs at 7.30 Cavalleria rusticana, Pagliacci. Theatre closed on Good Friday. RITERION, S 930 3216, CC 379 2565. Grp bigs 836 3962, Plays Good Fri & Baster Mon. Mon-Thurs 7.30. Fri and Sat 2 and 8.45. DARIO FO'S DRURY LANE Theatre Royal CC 836 3106. THE PIRATES DP PENZANCE. Owens here May 26. 808. Office now open. Group sales 379 8061. DUCHESS. S and CC 336 824T. Ever 8. Wed 3, Set 3.38 sed 8.38. RICHARD TODO. Detter. Neishit aed Carole Mowlam in THE BUSINESS OF MURBER. effice 379 6061. GREENWICH, S CC D1,358 7755. Even-legs 7.65. Mars Sat 2.30. EDWARD WOODWARD Is Serve a THE ASSASSIN

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Heywood, Alice Krige in BERNARD
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Mussorgsky's Pictures from an panely snaped. A shkenazy equalled in this performance, grandeur is a necessity— lavished on "Fragilité," with "Ondine" was full of lovely which be daringly began: a passages, and played with marwood "for minutes on end, clanging away inexpressively in a Fabergé egg), it sounds more melodic line was allowed to fall haunting when it seems to have

the "Great Gate" and some haunting when it seems to have into segments. The inexorable Promenadea. On the other hand, the impersonal regularity of a chill of "Le gibet" was softened

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dramatic "Catacombs" one bad to place his rushed "Baha Yaga," and a "Tuileries" and

a " Limogea market " too hectic

ACROSS

1 Settled belief in company verdict (4, 10)

10 Rear coach (5) 11 Decline independently to

disintegrate (4, 5) 12 Support to agitate outside

right (7) 13 More foolish to spot row (7)

14 Sea food I leave to rogue (5)

16 Batting commander as a rule (2, 7)

19 Finished seeing mistake (9) 20 Work for another underworld boss (5)

22 Bird starts getting out of breath (7)

25 To the two of us cardinal

rose high (7) 27 Severely criticise driver to

benefit society (5, 4) 28 Result from more pay (5) 29 Name of girl is Rose (7, 7)

DOWN

2 Not living at home with a spouse from Northern spouse fr Ireland (9) 3 Provide staff for alternative

police district (5)

4 Issue going well (9) 5 Sound against a cover (5)

8 Large number were quick to be disciplined (9)

8 Note to be expected (T)

stoppage (6)

15 Shut up about way over the 24 My goodness dol! (5)fence being troublesoma (9) 26 Share strike (5)

concerning

account (9)

17 Find a place to eat that's easy to reach (3-2-4) 18 Interest payable in future

21 Stepa left to computer (6) 9 Assist another kind of 23 Just about Liberal aptitude (5)

particular The solution to last Saturday's prize puzzle will be published 7 Provisionals question one 19 Anti-pop does get out of with names of winners next.

Middle-Easterner (5) order (7) Saturday. Saturday.

Monday April 5 1982

Jingoism is not the way

THE ARGENTINE seizure of the Falkland Islands is an outrage. Military invasion is an illegal and immoral means to make good territorial claims, bowever strong nationalist fervour may be at home. Britain must therefure resort to every viable means to counter the coup de main which placed 1,800 unwilling Falkland Islanders under the Argentine flag on Friday.

The seeming confusion with which British ministers reacted on Friday, as news of the invasion began to barden should not blind ooe to the fact that a diplomatic success, maybe small, but also significant, has been achieved. The importance of the Security Council

vote calling for an immediate Argentine withdrawal should not be underestimated.

Only Panama, with obvious reasons for Latin American solidarity, voted against. The Soviet Union, and its Polish follower, abstained. So did China and, with its own introcess in Cibrolton in mind. Spain with its own interests in Gihraltar in mind, Spain. What is significant about the vote is that all Third World members of the council supported the British motion. Those are the countries with strong and understandable anti-colonialist convictions of their own. They did not fall for the Argentine case that British possession of the islands was no more than another instance of colonialism.

Britain therefore, is in a position to marshal a powerful coalition of opinion, from Kampala and Kinshasa to Washington and Paris, against the Argentine attack. The Security Council resolution called fur a resumption of diplomatic methods to resolve the problem. Provided genuine pressure can be put hehind that demand, it offers the most attractive way out of the impasse. Full European support must be secured through the process of political co-operation.

Position of weakness

Flushed as they are with their military success, the Argentine generals will not find that prescription palatable. It is up to world opinion and to those who expressed it in the Security Council to make them see reason. Yet it would be foolish to forget that the United Nations has called before for a negotiated solution with scant success.

The lesson of Friday's invasion is that in the end you cannot negotiate successfully from a position of weakness. Only if world opinion does not merely leave it at the Security Council resolution is there a hope of some righting of that imbalance.

Similarly hard facts need to be considered in discussing the military possibilities. A British naval force operating in the South Atlantic would be stretching its lines of supply to their limit and maybe beyond it. Even if a counterblow were to be struck and were to be successful, the problem of the Falkland Islands would not disappear. Argentine determination to gain possession would be reinforced. The anachronism Britain seeking to retain control of an area thousands of miles away from its possible sphere of influence and remote from its present national interests would not be removed.

Several solutions

Amid the hubbub it is therefore essential to keep eves firmly fixed on a viable long term solution. Political morality demands that such a solution should not pass over the wishes of the Falkland Islanders who wish to preserve their traditions.

Several such solutions have been proposed. A condominium was one of them. Buenos Aires turned that down on the historical argument that sovereignty over the islands resides in Buenos Aires as heir to the Spanish empire of long ago. Another idea that failed to find favour was that Argentina should become snycreign in name, but that the Falklands should then

be leased back to Britain for a very long period
One could think of other ways out. A statute of
autonomy underwritten by the UN is intellectually
conceivable. Provided it were tu he properly drafted and secured, it might gu far towards meeting the Falklanders wish to lead their uwn lives.

Each of the long-term solutions would require both dispulants to swallow sume of their pride. But they would have the merit uf recognising that the Falklauders have rights of self-determination. They would also take account of the fact that geography makes the Falklands dependent to some degree on communic and communications links with Argentina and, in the long run, makes British protection for them a herculean task.

Political differences

The fact of the matter is that the Argentine Government believes that it has created a fait accompli. Buenos Aires will not budge unless the world at large and Britain especially are determined not to acquiesce in that. Argentine vulnerability to economic and other pressures should not be overlooked. A case can therefore be made out, at the very least, for keeping the Argentine Government in doubt about British intentions. If the Argentines know that nothing can happen tn them, then they will hardly be likely to entertain the idea of compromise. There should, however, be no mistake about this; it is the Falklanders themselves who would bear the brunt of any attempt to retake the

islands. What is deplorable is that the issue is rapidly becoming mixed up with political differences within Britaiu itself which have nothing to do with the matter in band. Not only the pride of the Argentine Government is involved. So is the standing, perhaps even the survival, of the Tory Government in Britain. That does not make for rational action on either side.

In truth, the British Government does have questions to answer. Why was it so evidently taken by surprise? Why had it misread the signals from Buenos Aires so badly that it neither took precautions, nor made a supreme effort to advance by its own chosen

route of diplomacy? The results of negligence cannot be undone by something near panic. Ministerial statements in the first, humiliating hours of the crisis have suggested a determination to drive out the invaders and reoccupy the islands; but to what end? There is no point in a large expenditure of force to reassert a right which, as the Prime Minister herself pointed out, we bave not the means to sustain in the long term. It is precisely because no substantial British interest was involved that the crisis was allowed to arise in such a careless way. The danger is that a process of escalation has begun which will be very difficult to control.

THE FALKLANDS INVASION

Argentina: behind the euphoria

By Jimmy Burns in Buenos Aires



Victorious Argentine troops raise their flag

the support not only of most of Argentina would inevitably line the third world but also of some European countries such as behind the Buenos Aires povern-Spain, and major powers like the Soviet Union and China. In the event the Soviet America's inion, China and Spain powers, bad judged by deeds alone."

The Argentices had antici- Union, China and Spain Galtieri rose through the pated a diplomatic victory at abstained, and the third world military hierarchy thanks to his the United Nations and the is far from heralding Argentina

is far from heralding Argentina as the justified "liberator from nonsense soldier in the fight vote on Saturday was a major colonial rule " as against the Montonero guerrillas setback. The Argeotine foreign tines had hoped between 1976 and 1978. His few ministry had hoped that hours Panama's thesis colonial rule " as many Argeo-Panama's thesis that any mili-

months of presidential powar of iotense lobbying bad ensured tary counter attacks against Latio American waters. Similar

up Latin American armies ment is utopian, rather than real. Brazil one of Latin America's major military powers, bad supported Argentina's sovereignty claims but refused to condooe the invasion. Indeed Brazil may even be prepared to allow its ports as refuelling stops for the Royal Navy if and when it approaches

feelings are shared by Chile. can neighbours is the possible profile domestically. future direction of Argentine foreign policy. They four that any vindication of Argentina's military exploits in the Falk lands might tempt Bueoos Aires to deal with its neighbours in a similar vein, particularly in territorial disputes like that which exists with Chile over the

Beagle Channel.

The reaction of the U.S. has also surprised the Argcotioe government. Since taking power Galtieri has gone out of his Central America. Buenos Aires had oever really expected the Americans openly to support the invasion of the Falklands, but they had certainly looked for-ward to a position of quiet acquiescence.

Davelopments in the last 48 hours are therefore threatening Argentina with the prospect of international isolation. And besides this there is the possibility of further economic sanctions from Britain and possibly other countries. But on balance most Argentines remain submerged in the "patriotic dimension of the military recovery" of the Falklands. Indeed the financial sanction announced by Mrs. Thatcher over the weekend have been hrushed aside as pinpricks. The threat of a British military counter attack is still generally dis-missed as bluff.

independent However analysts believe that major tion of everything the current saoctions by the EEC and the regime has stood for—a foreign U.S. would seriously damage policy firmly orientated to the the Argentine economy at a when it is already extremely vulnerable.

Argentina is still heavily defor balance of payments military defeat support and foreign banks like the Royal Navy.

the Bank of London and South The predominant considera- America and the First National tion of Argentina's Latin Ameri- Bank of Boston have a strong

Western countries such as West Germany are not only important suppliers but also participants in key sectors of local industry like cars and energy. Europe also remains an important outlet for meat-one of Argentica's main agricultural exports.

Argentine military officers have boasted that their armed forces could put up a strong way to forge a strong relationahip with Washington, particularly on such crucial instance. psychology rather than logistics. Independent strategists believe that any fullscale military confrontation between Britain and Argentina would almost cer-tainly lead to the destruction of the Argentine navy and the loss of the bulk of the air force. Casualties would be substantial on both sides, but particularly heavy on the Argentine side.

President Galtieri'a dilemma is that any climbdown over the Falklands at this stage could well destroy the prestige the armed forces have gained and might eventually precipitate the collapse of the military regime. Argentina could, of course, turn in on itself with a neavily protected economy and with the establishment of wider trade links with countries like the Soviet Union which already takes the bulk of Argentine grain.

Such a strategy however would be la outright contradicpolicy firmly orientated to the U.S. and an economic recovery programmie based on foreign investment. And that is to ignore altogether the political reperpendent on Western credit lines cussions of a humiliating military defeat at the hands of

Britain: 'now it is the time for action'

THE SUPREME irony of the Now is not the time for think- acknowledged as much yester-Argentice invasion of the Faulkland Islands was that it

will remain in the Falklands and will "go to battle" if and when a British task force arrives. By invading the Falklands the Argentine military solved in a matter of hours what

had eluded them in the six

years they had been in govern-ment; the unification of the nation behind them.

should not be underestimated

by Britain. When he took power

only last December he promised

that the "time for words had passed" and that the govern-ment "would henceforth be

reputatioo as a tough no-

President's rhetoric

always prided ltself—above and that it is prepared to go to almost all else—on its ability to any lengths to reclaim them. defend Britain. Now, in ao tion, it is in danger of embark-tions on the Tory benches to a attempt to persuade certain inlog on a course of action which point where many Tory MPs some of its own MPs privately helieve is unsustainable.

Britain may not be able to be very limited, defend a possession 8,000 miles The price of fa away io the South Atlantic, eveo Islands back-or of anything away to the South Atlantic, even is said a diplomatic sell present mood of nationalistic out—would be the head of at fervour that is not a sentiment many MPs are prepared to

Such thoughts, said one MP, are unthinkable at the moment. ing or defeatist talk. It is the time for action."

skelter for several

with the peso plunging from 2,000 to the dollar to 11,000 in

12 months of wild fluctuations.

invasion may only just be begin-ning to penetrate the dense

cloud of government propaganda

and ultra nationalist excilement

which still persists here. It took President Gallieri a whole

day to react officially to Mrs

Thatcher's counter invasion

threat. There was no parlia-mentary debate as in England, but there was much delibera-

result of the Security Council's

lion hehind the scenes.

The full significanca of the

rauskland islands was that it should take place on the same day as the young. Winston benchers were insisting at the Churchili was appointed to a new job at Conservative Central Office to sell the party's defeoce policies to the electorate.

The Conservative Party has a convenient shares this view.

By the eod of the weekend, attempt to salvage that reputa- Ministers had raised expectaseemed to regard some form of military engagement as almost In the long term, some Tory inevitable. In the circumstances, MPs were saying yesterday that the Government's options could

The price of failure to get the least one Cabinet Minister, and quite possibly two: the Defence Secretary and the Foreign Secretary, Mr John Nott, the Defence Secretary, more or less

day on ITV's Weekend World programme, as he responded to his own backbeothers with increasingly hawkish noises.

Saturday's debate showed the among his backbenchers as Mr on board that they got the Nott winding up. As soon as he cooditional support of the meet-sat down, the Government whips ing. fluential moderates that the worst thing for the party oow would be resignations.

As a result, the message to come out of the packed private establishment since taking over meeting of Tory MPs after the debate was that the party was not looking for resignations now. Initially, however, both Lord Carrington and Mr Nott got a very hostile reception indeed opposition gladly, and he has from the meeting. Successive had little sympathy for those speakers apparently made it Tory MPs who insist that he is clear that the Government set on cutting Britain's convenshould stop at nothing to get the tional defence spending

Islaods back.

The Government, they said, should he prepared to declare war as soon as the task force left port. The time for long term diplomatic solutions, it was said full extent of the rage on the was ooce Britain was back in Government henches: not since control. It was apparently only the Suez crisis has a Government after the two ministers had Minister caused such despair appeared to take this message

Eveo so, certain very vocal groups of MPs are still gunning for both Mr Nott and Lord Carrington. Mr Nott has had problems with certain sections milnority of MPs who normally of the Conservative defence coocern themselves with such as Defence Secretary last year. A highly intelligent man, with

cribes as a "low flash point". he does not suffer fools, or an excellent Foreign Secretary, Some rightwingers believe he get a task force to the South has consistently sold Britain short. For this group, the Rhodesian settlement was a discrete. There has long been disaster. There has long been Saturday's backbench meeting

was bent on getting rid of them huted to the sense of outrage in Saturday's debate. But the anger went far heyond that matters. As Mr Michael Foot pointed out in his most effecwhat one of his colleagues des- over as Labour leader, there was a sense that the Government "had betrayed" those who depended upon it

And that is the kind of allegation which really hurts the Tory Party. To answer it, the Government now seems to have

In the same way, while most committed Britain to taking Conservative moderates helieve whatever military action is that Lord Carrington has been necessary to reclaim the islands.

a suspicion among those MPs that if the Covernment did interested in the Falkland succeed in reclaiming the Islands that the Foreign Office Islands it could yet emerge with its prestige not only lotact. but enbanced. ministers. with memories of Suez, were saying privately that the Government could be digging a hole from which there may be oo graceful

way out.
Their hope was that in the tive performance since taking 'time it will take to get the task force to the South Atlantic. the present patriotic fervour might be tempered by a pragmatism which could yet hold the party back from a full-scale war.

Elinor Goodman

Men & Matters

England

expects . .

Did Margaret Thalcher have a premonition? I ask. Though the Prime Minister apparently gol no advance warning from the Foreign Office of the Falklands invasion, some weeks ago she suddenly despatched an urgent order to the National Maritime Museum in Green-

"Send me Admiral Lord Nelson," she commanded. As the Royat Navy sails belatedly from Portsmouth today, the Prime Minister must be musing about what prompted her to seek a portrait of Britain's most famous sailor to.

hang in No 10 Downing Street. Up to then her gallery had Frow's fight heen crowded with scientists and engineers, reflecting her preoccupation with the Industrial

and economic scene.

The museum, which has more Nelsons than we know what to do with," sent Mrs T



with the Ministry nf Defence?

Teddy Archibald, Greenwich's Curator of Oil Paintings, describes it as "an attractive thing" showing Nelson "with just a Bath and no hat"—a Bath, Order of, that is.

It was delivered to Downing Street two weeks ago and has already heen hung there. Whether the Prime Minister will be able to live comfortably beneath the Admiral's gaze now will presumably depend nn the oulcome of events io the South Atlantic.

Much of the parliamentary heat over the Falklands fiasco has heen geoerated from a small first floor office in London's Victoria. This is the base of Air Commodure Brian Frow and bis Falkland Islands Committee, set up in 1968 as an emergency body to handle an earlier scare and which has been lobbying since in the islanders' interests.

The committee comprises members of all the political parties, including half a dozen Tory knights. Frow took over five years ago. An ex-RAF man. he was British defence attache in Moscow and spent a number of years in the Cabinet Office on intelligeoce work.

Frow was also in command of RAF Hong Kong-where he spent some time chasing pirates up the China coast—and has been hitterly opposed to the Foreign Office idea, floated in quieter times, of an "Antarctic Hone Kong solution" for the Faiklands. Uoder this plan, sovereignty would have been ceded to Argentina and the sheep-strewn islands leased

attacked the FO for its neglect ride under its prospective new of the islands. He now wants proprietor Joe L. Allbritton. a graduated military response.

me yasterday.

House-room

What must surely be Britain's smallest huilding society, with total assets roughly those of a couple of three-bedroom semis, celebrates its 90th anniversary this year. The City and District Perma

nent, set up as a mutual benefit society by employees of Blrm-lngham Corporation in 1892, now has about 100 investors, assets of £48,000 and £12,000 to lend.

President Derrig Ferguson tells me that, in fact, the society lent nothing in 1980 and only about £800 last year. "The rise in house prices over the past few years has takeo them quite out of our reach oow," he says. "We lend largely for garages and bathroom extensions."

Though there are no restrictions oo who can invest in, or borrow from, the society, most of the people involved are employees of British Gas. Ferguson, a management development officer with the West Midlands Gas Board, and the other six directors draw no pay from the society. Almost half of the annual management expenses go in auditors' fees.

Just how much longer the society can survive is uncer-But Ferguson says the society's resources, at least, should earn it a place in the Guinness Book of Records.

Making news

"We'll Keep On Rollin"." shouted the baoner headline in Friday's New York Daily News. In recent weeks, Frow has But it could be quite a rough The Texas millionaire has 30 His office is busily gathering days in which to sew up a

a half-length study by Lemuel information to help the landing satisfactory deal with the news-of and onc of more than 10 portraits of the hero by this artist who died two years before Trafalgar.

information to help the landing satisfactory deal with the news-of a British task force. "We paper's 11 unions—and there have been getting people to are reports that up to a third gether who know the terrain, the seawced and pools," his of a job. Allbritton will be undertaking the union talks in the reson and he did not get person and he did not get where he is today—with a fortune estimated at around \$200m-by being anyona's

pushover.

Last year, for instance, he rode roughshod into Washington and spent \$80m on buying 40 per cent of the shares in the Riggs National Bank, a pillar of the capital's financial establishment. The first rection of the bank, which has assets of \$3.7bn, was nne of polite horror. But Allbritton is now pany board and chief executive.

Riggs apart, Allbritton's interests are mainly private businesses concentrated in banking, real estate, insurance and communications. He owned tha Washington Star for four years, running it in very tight style before selling it to Time Inc. at a profit in 1978. Three years later, Time felt obliged to close the paper.

Allbritton now owns eight newspapers in the North Eastern states, along with a ciutch of radin and TV stations. But the loss-making Daily News, the largest big-city news-paper in the U.S., is nn quite a different scale.

If he gets the cost savings he needs, Allbritton will find himself in head-on confirmth Rupert Murdocb's New York Post. The thought of a nose to collar button confrontation between the 5ft 3io Texan and the Australian magnate is one to make mere mortals quail.

Book ends

Somewhat paradoxical, I thought, that the book of the month offer to readers of "Mind Somewhat Your Own Business" magazine should be "The Iorimate Sex Life of Famous People."

Observer

Some of the worst wounds...



are the ones that don't show

It used to be called shell-shock. Now we know more. We know that: there are limitations to the human mind.

Snidiers, Sailors and Airmen all risk mental breakdown from over-exposure to death and violence whilst in the service of our Country. Service... In keeping the peace no less than in making war We devote nur efforts solely to the welfare of these men and women from all the Services. Men and women who have tried to give more than they could.

Some are only 19, a few are nearly 90 years of age. We help them at home and in hospital. We run our own.

Convalescent Home and, for those who are homeless and cannot. look after themselves in the community, our Hostel gives-permanent accommodation. For others, a Veterans' Home where they can see out their days in peace.

These men and women have given their minds to their Country. If we are to help them, we must have funds. Do please help to repay this vast debt. It is owed by all of us.

They've given more than they could please give as much as you can."

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THE U.S. PRESIDENCY

Why Reagan's support is sliding Lead: more facts

By Reginald Dale U.S. Editor in Washington

"IN SHORT, MR PRESIDENT, tive comments. Almost everyyou have betrayed those body has at least one reason for Americans — and among them disliking Mr Reagan's policies of the promises you made." extract from open letter from Mr Lloyd McBride, president of the United Steelworkers of

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Tradings

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President Ronald Reagan is "likeable" according to 85 per cent of Americans: Time Magane opinion poll.

Times/CBS Opinion Poll, taken
"Reagan Stinks:" very drunk in mid-March showed that the lady on Denver, Colorado

"The days of sensational, quick victories are mostly behind us. Now we move from the glamour of initial commitment to the grit of the long haul:" President Ronald

Fifteen months into his Presidency, President Reagan is losing his image of amiable unflappability. What last year looked like praiseworthy determination to solve the country's problems now begins to appear more like simple stubborness. His opponents ridicule him almost every time he opens his mouth, and last week's much-heralded Press conference did little to repair the damage.

However there is still no real common perception of Ronald Reagan - among Americans, whatever cynical Washing-tonians may think about him. An enormous range of reasons is offered as to why people are for or against him, or, more

for or against him, or more often, partly for and partly against him.

Mr McBride listed live specific areas- of economic policy in which he said Mr Reagan had broken campaign promises. A Florida estate agent admired him for sticking to his principles — notwithstanding the disastrous collapse of the homs.

A resident his predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than his predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than his predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than his predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than his predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than list predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than list predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than list predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than list predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than did predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than list predecessor. Mr Reagan may be sliding more steeply than Mr Carter, who lost standing slightly faster than did predecessor. Mr Mr McBride listed live specific standing slightly faster than list predecessor. Mr Mr McBride listed live specific standing slightly faster than list predecessor. Mr Mr McBride listed live slightly faster than list predeces may be sliding sli ciples — notwithstanding the Republicans generally as disastrous collapse of the hous. November's mid-term elections ing market. A young army cap- loom closer. And there have tain supports his defence been an increasing number of policies, but is increasingly signs in recent weeks that Mr desperate over the high interest Reagan and his closest advisers rates he has to pay on his second are beginning to get a little

mortgage. A girl working in a Mid-Western flower shop could not ing to plan. On the economic Wall Street and the business care a hoot about his economic front, neither Mr Reagan, nor community. Twn weeks ago, the policies, but condemns him for: the big business interests that failing to support the equal supported him so unquestion-rights amendment for women, ingly last year, expected reces-A black taxi-driver is strongly sion to prove so obdurate. The opposed to, even frightened by, long-awaited signs of economic bir Reagan's cuts in social programmes, but thinks that the into the mists of spring like a President is reasonably all right, will-o-the wisp. Unemployment,

some members of our union — and distillusion is beginning to who voted for you on the basis show up strongly in the opinion polls. Even Mr Reagan's Conaervative supporters feel betrayed they think his Administration has become infiltrated by liberal "wets" under the leadership of Vice-President George Bush.

The most recent New York number of those approving Mr Reagan's handling of the presidency had fallen to 43 per cent, less than the 46 per cent who approved of Mr Carter's perapproved of Mr Carter's per-formance at a similar stage of his term of office. The latest Gallup poll gave Mr Reagan a 45 per cent disapproval rating, against only an equivalent 36 per cent for Mr Carter four years ago. More strikingly, he is approved by only 7 per cent

The 43 per cent approval rat-ing compared with 49 per cent in January and 67 per cent a year ago — a figure that was almost certainly inflated by sympathy following the March 30 assassination attempt the anniversary which Mr Reagan "celebrated," if that is the right

U.S. polisters, however, caution that the figure must be seen against a trend in recent years under which each President loses approval just a littla faster than his predecessor. Mr

loom closer. And there have

Things have not gone accord-



President Reagan 'facing a high disapproval rating'

rates to remain so high for so long. Even the faster-than-expected drop in inflation. the one bright spot in a sombre economic picture, has had the ironic effect of compounding the Administration's difficulties with the Budget deficit. Profits original budget calculations were based.

If deficit estimates don't matter much to Mid-Western flower-sellers, they certainly do to community. Twn weeks ago, the prestigious Business Rouodtable, representing the captains forces of Marxism-Lenirism.

of U.S. industry, told Congress of its deep concern that the projected deficits, unless dealt believe the U.S. has alread with promptly, would encourage continued high interest rates and slow down economic

Administration expect interest American Stock Exchange showed that nnly 41 per cent
"strongly approved" of the President's economic programme, compared with 67 per cent a year ago.

The foreign policy quagmire in which the Administration is now caught -involving particuand incomes are not yielding larly El Salvador and the rest the tax revenues on which the of Central America—is also a surprise. Many Administration nfficials now bitterly regret that nne nf Mr Alexaoder Halg's first acts as Secretary of State last year was to catapult El Salvador into the headlines as a key test case of America's ability to resist worldwide

Another poll 10 days ago suggested that six in 10 Americans believe the U.S. has already gone too far in El Salvador simply by sending 55 military advisers. Seven in 10 would as white politicians go — at 9 per cent, is causing hardprobably better than his preship and resembent at the decessor Jimmy Carter.

These are fairly representation's politicist.

White wall stow down economic advisers. Seven in 10 would oppose any further military aid approach the Wall Street investment agreed that success for the community conducted by the Left-wing guerrillas would lead

American Governments and chanted with the networks, to endanger U.S. national security. whom, in his normal role as a

Reagan's current intention of not seeding U.S. combat troops to El Salvador, and more than 80 per cent said they would he against such a move. Asked if they would support young men who resisted a draft to fight in the coootry, 51 per cent said they would.

The Administration has also been nonplussed by the American Indian dish made of strength of the campaign for a maize and heans, was inevitfreeze on nuclear weapona even in Right-wing Republi-can stroogholds—that has now surfaced noisily in Congress.

Mr Reagan backed one watered-down version of the freeze proposal at his news con-ference last Wednesday, but his response has been criticised as too little and too late.

No one has yet produced a convincing reason for the phenomenon, although it is obvious that loose administration talk about nuclear war-fighting can hardly have helped. seems to come nff. The Washington Post/ABC News Poll also found that 45 per cent of Americans believed the chances of nuclear war bad grown since Mr Reagan assumed the Presidency, Fortysix per cent felt he had not done enough to limit the nuclear arms race.

Partly in response to this widespread sentiment and stronger fears in Western Europe Mr Reagan took to the television screen last Wednes-day for the first time at the peak viewing hour of 8.00 pm. It was a gamhle and far from clear whether it paid off.

He came over as unusually unsure of himself and typically his statistics were immediately challenged by his Democratic opponents. The old magic even the familiar homely grin-The reason for the change in

format was partly a growing feeling in the White House that the Press, and particularly the hig three television networks, do not give Mr Reagan a fair deal. His eight previous Press conferences, all in the afternoon were in media jargon, "filtered" through the main evening news programmes. The White House staff, and Mr Reagan himself, argue they were unfairly edited to show him at his worst

It is ironic that Mr. Reagan

An astonishing 42 per cent star television performer, he said they do not believe Mr owes so much—possibly even his Presidency.

Two weeks ago, he publicly complained that "downbeat" news coverage had delayed the economic recovery and asked: "Is it news that some fellow out in South Succotash someplace who bad just been laid off should be interviewed nationwide?" Succetash, an ably sought out by the Press. They succeeded in unearthing a Succetash Point in Rhode Island, where they found three people unemployed, and had a

he is unconcerned about the poor, the blacks, the under-privileged and even the ordinary American working man. While he tries hard to

His anecdotes are fast hecoming famous. Last month be was reported to have told a story about a young man who used food stamps to buy an orange and with the change bought a bottle of vodka. There seems to be absolutely no evidence of such an eveot. His deafness is also reported to be getting worse, and he is too proud to ask people to repeat themselves if he does not hear them the first time.

In every speech he now stresses the theme of social "fairness," to correct his uncaring image. His aides say they are trying to steer him towards "people events," such as his sudden appearance last month at flood-stricken Fort Wayne, Indiana, where he stood briefly in a line of rescue workers pas-sing sandbags. Not everyone is impressed by this. But It would be wrong to conclude that he has totally lost his charisma or that all his supporters have

In the great conservative heartlands of America there are still plenty of people who are prepared to give him more time. But equally, as another recent poll showed, the majority of Americans do not want him around for another four years after his first term expires at the beginning of 1985.

to the collapse of other Latin should have become disen-

Britain shoold switch to unleaded petrol is a complex one. Some say the medical evidence is strong enough to justify a ban on lead additives in fuel. Others have serious doubts about the worth of the research that has been done so far. They rightly point out that there are many other sources of lead hesides petrol fumes.

almost everyone concerned has an axe to griod. The grinding is becoming an increasingly noisy and public business. This Mr Reagan's image problem is compounded by his failure to shake off the impression that —meagre though they may be -meagre though they may be in some instances—should be so hard to come by.

unleaded petrol.

It is understandable that government press offices should settled.

Lombard

are needed

By Sue Cameron

itical masters?

The costs and political implications of going to lead-free petrol in the UK mean that

The UK automotive industry. for example, has evidently made out to the Government a powerful case against unleaded petrol. arguing that the total cost of such a move to car manufacturers could be as high as £350m. It has embroidered its case, with the threat that BL might have to be given yet more taxpayers' money to re-design engines so they could run on BL itself will not say how

much it spent on converting its Jaguar XK engines to take unleaded petrol so they could be exported to the U.S. Does BL not know? If not, why not? Or could it be that the figures might run counter to the industry's general propaganda line? Conversion costs can vary considerably from one type of engine to another and there might be little point in trying to extrapolate from a single example. But BL could draw attention to these caveats itself. Reticence merely leaves the field wide open to the motor manufacturers' opponents in the unleaded petrol lobby.

BL is open compared with the Department of Health. A request for a list of the research studies published since the Government-sponsored Lawther report two years ago, drew a straight refusal to provide any information. (CLEAR, the Campaign for Lead Free Air, was happy to give full

THE ISSUE of whether or not shy away from offering issues. But should it not be part of their job to supply any available facts when asked, both in the public interest and in the interests of their pol-

In the 1970s the legal limits on lead in petrol were progres-sively reduced by 0.05 grams temptuously referred to as "salami-slicing." The Govern-ment reckons it has taken a bold initiative with its plans to lower the limit from 0.4 grams of lead per litre of petrot to 0.15-a cut of 62.5 per cent. But instead of praise, it is finding itself faced with mounting hostility from worried parents.

The Government gave its reasons for reducing rather than banning tead in petrot during a comparatively hrief Commons debate. But if it is to convince the public of its case and assuage what could be unnecessary fears, it should make available all the evidence on which its decision was hased, including any relevant information it received from companies such as BL.

It should also strengthen some of its departmental press offices-which vary widely their competence. One of the maio ways in which governments cao reach a wide audience is via newspapers, radio and television, Oppor-tunities to disseminate factual information-particularly on a subject that so intimately coocerns people as children's health—should be seized with both hands.

Supporters of CLEAR may or may not he right in demanding a simultaneous government commitment to both a reduction of lead in petrol and a switch to unleaded fuel for new cars, But their appeal has certainly struck a chord-witness the findings of the 'atest MORI poll when 77 per cent of those questioned were found to favour lead-free fuel, even though this would push up petrol prices.
Unless all the interested

parties—and most notably the Government—are forthcoming with their facts, CLEAR will win the argument by default. That is not the way for an Issue of this importance to he

Present the card, receive

Letters to the Editor

A radical alternative to the problems of the CAP

From Mr V. Gaskell

Sin.—Your editorial "A better way to help farmers" (March 30) comes at a most opportune

misfortune—foot and mouth m
Funes—we in Britain's pig
industry await with trepidation
those extra pigs converted to
bacon which other more protective countries have refused to accept. Those pigs will reduce our prices, so we the British pig industry will be helping to pay for their disaster.

So long as the Common Agri-cultural Policy makes the more fair playing member countries into sacrificial lambs, public opinion will yeer against the EEE and passions in Brussels will yary from high-dudgeon to decrease them.

The concept of equalising food production eircumstances in countries as varied as those in the REC is ridiculous. Any one with the remotest under that the essential natural 30 was right to highlight, once elements in growing things and again, the problems associated that man adds fertilizer and tills with the common agricultural standing of agriculture knows the ground. Even the REC can-policy (CAP).

Factors in current

share prices

existing structure or enormous subsidy, the more likely we are to be able to look forward to a prosperous, politically united Europe fulfilling the EEC's original ideals.

But there is, as you point a radical alternative, nar direct income support. Should, notwithstanding problems associated with If however sectional interests in one state: triumph over those

in another, disillusionment and disunity must follow in our case the pig sector will decline.

Negative attitudes will replace positive ones and we will cease to have the incentive to go out into the market place to sell our bacon and expand our industry. Vaughan Gaskell Gaskell Bros,

Warrington, Cheshire

From Mr D. Patchett.
Sir.—Your leader of March

not make it rain harder in It has been argued that past Sicily or grow olives in Ulster. developments in the Com-The sooner politicians face up munity's agricultural policies, to reality and accept that the and the obvious unwillingness of policy makers to undertake in farming throughout the EEC major reforms, are evidence usfortune—foot and mouth in unfair and involves either that there is no real alternative destruction of parts of its to today's basic principles of agricultural policy.

> But there is, as you point out, a radical alternative, namely direct income support. This problems associated with its establishment, enable a more correct economic halance to be struck between the infinence of price on earnings and their impact on production.

> The variety of demands made on the CAP surely requires a more flexible use of the present instruments and the use of new measures. Therefore it is time that the present dual function of the CAP was ended and a more equitable and less wasteful policy be introduced.

D. M. Patchett. University of Oxford, Institute of Agricultural Economics, Darlington House, Little Clarendon Street, Oxford.

zero coupon loans or even

in price in order to offer new to suit the temperaments of different investors would he a positive step towards cutting the costs of debt funding and thus reducing the PSBR. Martin Weale.

Sidawick Avenue. Cambridge.

completely may I make a plea for the Government to adopt a more lunovative approach to funding. Indexed stocks appeal to the risk averse investor who is prepared to accept a lower real return than he would nn ordinary gilts because of the reduced risks involved.

But what about the gamhlers among us? Low coupon stocks are more volatile than high coupon stocks and those who enjoy risk will huy these at a

stocks with a negative compon. These latter would be called savings loans and would show the volatility normally associated with partly paid stocks. (which is what they would he). If such stocks were redeemed hy annual drawings they would have yet more appeal for the risk-lover. Providing a spread of stocks

Department of Applied Economics, University of Cambridge,

Sir,—The correspondence in your columns (March 25 and 31) coocerning Bristol City Foothall Club appears to me ta be entirely appropriate as nnly at Ashton Gate, home of Bristol City, have I stood on the

Divestment and Lloyd's brokers From Mr A Smallistic

Sir,-John Moore (March 29) comments the Parliament believes that there is not the same conflict of interest where hrokers own underwriting agency companies writing for company securities that is thought to exist when the security is provided by underwriting members of Lloyd's no the grounds that "Brokers own the capital they provide for their non-Lloyd's

agency activities. . . . Parllament may well believe this, but it is not necessarily so. Some brokers own the capital of insurance companies for whom an agency subsidiary conducts the underwriting, but it ia more often the case that the owners of that capital are every bit as distant and separate from the ownership of the agency as are members of Lloyd'a.

If the public interest were really at risk in permitting brokers to continue to own Lloyd'a managing agencies, it is bard to see why it should not be equally exposed where most company agencies are con-

Happily for the public at large it is unlikely that there is a real conflict of any conse quence anyway. The theory is that a broker may "feed" business to underwriters-whether they are Lloyd's or companies cannot matter-" controlled" hy that hroker at higher premiums than could be nbtained by a hroker who had no interest in the commissions to be earned or underwriting. It could happen, but since to behave in that way would he to invite compe tition from other brokers, only a very naive broker would be likely to try it, and naive brokers have long vanished from the scene.

A more likely "conflict" arises the other way round: that a broker would use his influence with an underwriting venture to obtain keener terms than an independent underwriter would be prepared to quote; but that would be advantageous to the insuring public and will happen whether or not there is divestment. It is good old-fashioned market clout, and underwriters bave lived with it (and Giped with it) all their working lives, since it depends for its success not upon "control" but upon the profitability and size of a broker's account. irrespective of "ownership" of any agency, Lloyd's or companies. Alan Smallbone.

30, Temple Fortune Lane, NW1.

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Lattic

Sir.—In commenting on the lex examination of the pros and cons of dividends, Mr R. A. Hammond - Chambers (March 29) asserts that U.S. directors follow a dividend policy of less is better than more. If nnly that were true Only rarely is dividend cover greater than 23.

More importantly, he asserts

that all earnings should rightfully be paid out as the just property of shareholders, especially because retained What about the profits have not been capitalised in company share prices. Chearly, share prices have per-formed poorly. But had divi-dends not been paid, the serious research on the market's behaviour indicates shares would have declined hy

that much less.
Today's share prices are based on two principal factors: expected future corporate returns measured in terms of free cash flows distributable to investors over time, and the risk associated with generating FCF described as a capitalisation rate or required rate of return. We believe that it has been a substantial increase in the second factor, much more than a decline in the first reason why we should not have Hazel Grove, Stockport.

factor, that has been responsible for poor share price performance. Thus as interest rates have risen as lenders From the President, Chase have demanded higher returns, Pinancial Policy equity investors who bear even more risk likewise have demanded higher returns. Since expected FCF has not kept pace with required

> investors adequate returns hased on lower entry prices. Chase Manhattan Bank. 1. Chase Manhattan Plaza, New York, New York 10081.

> returns, shares have declined

gamblers? From Mr M. Weale Sir.—Before the excitement In a position to over indexed gilts dies down

comment From Mr W. Tyler

terraces next to a supporter who has filled in the time before kick-off by studying the Finanpremium because of the added William Tyler.
excitement. Indeed there is no 17, Beaumaris Crescent,

PENDING DIVIDENDS

£3.3m increase by Laird Group

the Laird Group rose from by the release of the provision £8.14m last time to £9.19m mede in 1979, and net available giving record figures of £16.85m profits were almost doubled at for the year ended December 27, f12.1m (f6.12m).

1981 compared with f13.57m previously. Turnover for the 12 (f2.1m) leaving a retained months climbed by £78.2m to surplus of £9.27m, compared with

As forecast in August, at the time of the rights issue to raise dend of 2p (1.85p) per ordinary stock unit is being paid. This from 3.7p to 4p.

After tax of £3.96m, against

£3.75m, net profits were ahead by £3.06m to £12.88m. The tax

Extraordinary debits showed a decrease from £21.7m to £0.75m—the 1980 figure included an £15m charge for the closure

Net assets per ordinary stock unit increased from 101.1p to around £16.6m net, a final divi-dend of 2p (1.85p) per ordinary The group reports that it has stock unit is being paid. This received all of the £2.4m final raises the total net payment settlement as compensation for its 50 per cent holding of ordinary shares in Cammell Laird Shipbuilders, which was nationalised in March 1977. shares in Cammell charge included oversees tax of In current cost terms, efter £2.29m (£1.85m). Stated earnings tax profits for the year were per stock unit improved by 0.6p £9.6m and earnings per stock unit were 14.2p.

The group's interests cover transport systems, motor com-ponents, specialist engineering products and service industries.

Stanley Miller recovers some of lost ground

upon Tyne building contrector end civil engineer, incurred e loss of £72,486 in 1981. In the

loss of 172,486 in 1881. In the previous 12 months, the group had profits of £59,985.

Turcover fell slightly from 116,94m to £16,25m. There was an operating loss of £242,480 against profits of £86,862.

Associates profits amounted to £169,994 compered with losses of £98,877.

The loss for IFE populations

There was 9 tax credit of the previous year's £466.521, and the previous year's £466.521, and the previous year's £466.521, and the previous year's £466.521.

ALTHOUGH INCREASING its loss per 10p share was 0.28p second half pre-lax pro6is from (earnings 8.75p). £51,239 to £115,760, Stanley Miller Holdings, the Newcastle-chairman recently following the death of Mr E. Bell, says trading in the second half was sub-stantially improved on that of

this resulted in a net loss of turnover. He expects the group £15,486 (£526,506 profit) offer os a whole to improve its perminorities of £1,639 (£1,766). The formance in the current year.

Sunbeam Wolsey up sharply

hosiery and knitwear maker, Snnbeam Wolsey, more than doubled from 1RE325,959 to doubled from 1RE325,959 to f676,130 for 1981, including an employment subaidy of £213,035, against £302,950. Turnover increased from £22.01m to £24.13m.

At half-time, taxable profits were down from £42,000 to £6,000 and included £67,000 (£142,000) employment maintenance sub-sidy. The board then said that given any type of reasonable

> More Company News Page 23

trading conditions and an elimination of absenteeism and production problems, a higher second ball figure was hoped for. Second balf results, bowever, are traditionally better than the

to 3p net.

Tax took £65,106 (£71,970 credit) for the year and minorities secounted for £34,857 1£9,112). Extraordinary items added £27,348 (£33,155) and this

added £27,348 (£33,155) and this amount was again transferred to capital reserve.

After deducting preference dividends of £66,445 (£70,980) and ordinary payments of £37,442 (£158,295), the retained surplus came through ahead at £372,280, compared with £159,542.

FT Share Information

The following securities have been added to the Share Information Service:
Greenwich Cable Communica-Greenwich Came Communitions tSection: Electricals).

Cass Electronics ready for USM introduction

BY TERRY GARRETT

time: get it too wrong and there are questions in the House. Brokers Savory Milln are scratching their beads with just such a problem. Their issue, Cass Electronics, is nowhere near tha Amersham league, no MP is going to get excited if Savory gives the company away, but it still presents a tricky pricing

Cass Electronics, specialising in internal communications systems for industry and the health care market, has e fashionable enough ring to it for its sponsors to think in terms of a fairly fancy rating. But a fifth of profits come from the less glamorous area of arts and crafts shops. Savory will be making a placing in the next few days raising around £1m—half for the company and half for the Yearly earnings per 25p share for the company and half for the rose by 2.4p to 6.4p, and the dividend is stepped up from 2p USM are likely to start after The herbers will need to be a start after the company and half for the company and half for the company and half for the rose by 2.4p to 5.4p are likely to start after the company and half for Easter. The brokers will prob-ably opt for g price that will give an earnings multiple in the bigh teens, and a market capitalisation of over £6m on pre-tax profits of £0.75m.

The rather odd-ball trading mix has come together because of family ties. Mr Eric Cass founded Cass Electronics in the mid 50s. His brother, Wilfred, has been a director of Electronics ever since its inception though his career bas taken him into

wider fialds. In the '60s Wilfred became managing director of Hadfield Paints, later taken over by Bestobell. He juined Buck and Hickman in 1970 as managing director only to have that company whipped from under bim a year later by Sterling Credit. The same year he bought 30 per

Tharsis up

-pays more

PRE-TAX PROFITS of Tharsis

to £0.38m

two separate companies together was Arts' purchase of three Craftsmith shops from W. H. Craftsmith shops from W. H. Smith for around £250,000 in February 1981. Electronics provided Arts with the money to finance the deal.

Electronics was one of the first companies to launch direct speech intercommunication from which it has expanded a wide range of systems—programmable bleepers, bospital communications, alarm calls for sheltered housing the elderly) and telephones (PAX) are just a few examplas.

Closs to 10 per cent of the equipment supplied is on a rental basis and a national service and maintenance operation backs un cash sales and rental agreements. About onethird of it scustomer base is industrial end commercial clients with the rest accounted for by the health care market—local and central Government.

In the last three years aales by Electronics have risen from £1.9m to £3m (putting aslde Faxdata, a company acquired in 1990 supplying a range of nurse call units). Trading profits have more than doubled from £329,000 in 1979 tn £724,000 last year.

PRICING new issues is not the cent of Reeves and Sons, manu-easiest of tasks at the best of facturer and distributor of Wilfred Cass is confident that time: get it too wrong and there artists materials. That company he can produce decent returns too was sold (five years later to Reckitt and Colman) but from there Wilfred set up his own art materials business with two retail ontiets.

That two brothers have worked closely together over the years but the eatalyst for bringing the but the eatalyst for bringing the control of the properties together.

Where we have has purchased were should central overheads so making sites. Stock levels have been doubled and ranges expanded by adding four new departments including DIY too was sold (five years later to where W. H. Smith failed. The Reckitt and Colman) but from shons he has purchased were departments including DIY
picture framing (evidently a
growth area) and "true" artist
materials. More lines geared towerds male customers and children bave also been Intro-

From the retail base Arts is expanding into mail order, selling embroidery and stitching kits through the Sunday mage

zines.

Taking the company public, the Cass brothers believe, will give a boost to its image when dealing with industrial and trade customers—which include household names like ICI and BP—and local authority buying departments. From that point the USM launch is a marketing exercise.

But it also allows the family but it also allows the ramity to raise cash out of the business both now, and perhaps in the future. Apart from the £0.5m of new money for the company Eric Cass will sell e 10 per cent holding, reducing his stake to 62 per cent. Other members of the Cass family, including Wilfred, will bold a total of 18 per cent 18 per cent.

Also, the move gives Cass paper to make acquisitions or launch further issues. The brothers see opportunities for The acquisition of the Craft smith shops has obviously transformed the Arts side. Trading profits jumped from £33,000 in 1980 to £185,000 last year on a profilers see opportunities sould consider the complementary busing the complementary busing for Arts, But they don't themselves taking the complementary busing the complem both complementary businesses in Electronics and further stores for Arts. But they don't see themselves taking the company

Dates when some of the more important company dividend Detes when some of the more important company divident statements may be expected in the next few weeks are given in the following table. The dates shown are those of last year's announcements except where the forthcomiag board meetings (indicated thus*) have been officially published. It should be emphasised that dividends to be declared will not necessarily be at the amounts in the column besided. Announcement last year."

at the studence m or			Аплоциса-
Deta	Announce- prentiasi year	Deta	ment last
		*Huntley and	
Akroyd end Smithers May 11	Int. 3.5	PalmerApr 5	Finel 2.44
Assoc. Peper	Int. 0.6	"Kwik Save BiacountMay 6	Int. 1.5
IndsMey 12	Int. 6.5		Finel 1.875
8AT IndeApr 29	Inc. or	Laing (John)May 1 Laporte indaApr 23	Final 3.5
Bank of IrelandMay 14	Final 3.5	*Leed IndeApr 7	Final 5.96
*Bank of	-	London Srick Apr 8	Final 5.96 Finel 2.632
ScotlandApr 13 Barrow	Finel a.6	*Low and Boner Mar 29 *Menzies	Finat 9.5
HepburnApr 16	Final 1.4	(John)Apr 20	Final 5.0
*Blackwood HodgaApr 14	Finel 1.5	•Mergen CrucibleApr 16	Finel 3.0
Blue Circle IndsApr 29	Finel 10.0	Mowlem	Final 6.85
*BowsterApr 6	Final 7.25	(John)Apr 30	
British Heme StoresMay 11	Final 2.75	*NEIApr 12 *Pearl	FiggT 2.5
*British		AssuranceApr 14	Finel 13.0
PrintingApr 5	Final due	Peamon May E	Final 4.805
British SugerMay 12	Ini. 7.5	LongmenMay 5	Final 8.25
*8rixton EstatesMey 5	Finel 1.69	Pearson (S.) May 5 P & O May 6	Finel 5.0
Brown Boveri		*Phoenix AsceApr 7	Finel 8.4
KantApr 10	Final 1.2	PRMCApr 21	Final 5.3
Brown	Int. 1.35	*Reod (A.)Acr 8	Final 2.46
(Matthew)May 7 *Burmah OllApr 14	Finel 5.0	*Rie Tinto-ZincApr 16	Finel 10,5 .
Coste PetoneMoy 13	Final 2.6	Revel Sank	(1.1.6)
Common	I EA	ScetlendMay 7	Int. 2.4
BrosMay 5 CurrysApr 21	Inj. 5.0 Finel 7.6	*RuberoidApr 7	Fmel 2.65
*DeltaApr 21	Final 1.82	Ruaby Portland	Final 2.5
DunlopApr 23	Final 1.82 Final 1.35	Cement Apr 5	Final 5.0.
*Empire StoresApr 21	Final 2.7	Sainabury (J.) May 6 Semuel PropeMay 1	Int. 1.2
European	Final 3.45	*Scottish	
FernesMay 11	FIRM 3.43	MetropolitanApr 6	Int. 1.25
*Expended MatalApr 7	Fins1 2.5	Saem Hidge May 11	Final 1.0 Final 0.75
Flight		Senier EngApr 8	Finel 8.0
RefuellingApr 23	Final 1.6	Simen EngAor 27 Smithe IndeApr 14	Int. 3.7 .
French Kier May 5 Gerrerd and	Finel 2.3	6mith (W. H.) Apr 21	Finel 3.2
Gerrerd and Nat. OiscApr 27	Final 8.0	•Sun AlliancaApr 7	Finel 16.0
*Gill and		*TarmecApr 27	Finel 10.5
DuffueApr 7	Final 4.87	Taylor WeedrowApr 9	Finel 10.157
*Glaxo	Int. 3.75	Telephone	
Gmnd MatropolitanMay 15	Int. 3.175	RantaleMay 5	Finel 8.25
Hembro LifeApr 14	Finel 8.5	Tozer Komoloy Apr 21 Trefolger	Final 0.795
Hell (Matthaw)May 8	Finel 6.552	HouseMay 13	lni. 3.0
Hammemen PropMay 1	Final 8.5	AmoldApr 23	Finel 3.3
*Herns	Final 4.0	UOSMey 7	Finel 3.61
QueenswayApr 21	rinai 4.0	BraweriesMay S	Int. 2.5
Hewker SiddeleyApr 15	Final 5.2	8reweriesMay S •WeirAnr 5	Finel nil
Hepworth (J.) May 5	Int. 0.79	*Wimpey [G.)Apr 29	Finel 1.7
*Higgs and HillApr 6	Final 2.8	* Soard meeting Inlim	eted, † Righte
Heuse of	C	lesue since made. \$ Te	a fres, § Scho recost.
FreesrApr 29	Finel 4.6		

U.S. \$25,000,000



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Floating Rate Capital Notes Due 1986

In accordance with the provisions of the Notes, notice is hereby given that for the six month Interest Period from 5th April, 1982 to 5th October, 1982, the Notes will carry an Interest Rate of 15th per annum and the Coupon Amount per U.S. \$1,000 will be U.S. \$79.74.

Credit Suisse First Boston Limited Agent Bank

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public limited company.

A member of The Association of Investment Trust Companies

Annual Report Year Ended 31st January 1982

	1982	1981
Earnings per Ordinary Share	3.33p	3.48p
Total Dividends per Ordinary Share	3.35p	3.25p
Net Asset Value per Ordinary Share	116 <i>4</i> p	101.2p

Geographical Distribution of Portfolio Far East North America 33.3%



Review of Year Net Asset Value per Share up 15.0%. All Share Index up 14.5%.

- Significant exposure to overseas currencies has protected asset value against weakness of sterling.
- Dividend increased to 3.35p from 3.25p per ahare. Proportion of investments in Far East doubled to 12.8%.

Policy and Prospects

- Long term growth of capital to be primary objective.
 An international portfolio invested in the stronger and emerging economies of the world. Emphesis on quality investments affering above average earnings growth leading to capital appreciation and rising dividends over the medium term.
- Dividend to be at least maintained although revenue growth in the short term may be
- Immediate outlook for world economies depressed, but falling interest rates and more

stable energy costs should lead to resurgence of confidence later in 1982. To obtain a copy of the Report and Accounts, return this form to the Managers and Secretaries, MARTIN CURRIE & CO, 29 Charlotte Square,

Edinburgh EH2 4HA (Telephone 031-225 3811). Name (Block Capitals please).

MALAYSIA

U.S. \$250,000,000 Floating Rate Notes due 1992

In accordance with the provisions of the Notes, notice is hereby given that the rate of Interest for the period from 6th April, 1982 to 6th October, 1982 has been fixed at 15: 6875 per cent. per annum.

On fith October, 1982 Interest of U.S. \$797-4479 per U.S. S10,000 nominal amount of the Notes and interest of U.S. \$19,936-1979 per U.S. \$250,000 nominal amount of the Notes will be due against interest Coupon No.1,

Swiss Bank Corporation International Limited Reference Agent

THE KYOWA BANK, LIMITED Negotiable Floating Rate U.S. Dollar Certificates of

Deposit Maturity Date 6th October, 1983

In accordance with the provisions of the Certificates of Deposit notice is hereby given that for the six month interest Period from 6th April, 1982, to 6th October, 1982, the Certificates will carry an Interest Rate of 1518% per annum.

Manufacturers Hanover Limited



N.A.V. at 31.3.82 \$43.32 (DFIs 115.97) YIKING RESOURCES INTERNATIONAL

Heidring & Pleason N.V. ngracht 214. Amsterdam

increased from £299,244 to £382,542 in 1981 after being lower at £108,000 against £137,000 towards the end of 1980-81, bave belped to reduce losses in the first half of the current year from £121,965 to £83,923, on lower sales of £2.25m (£2.39m). In the first six months, The divi-dend is raised from 2p to 2.5p During the six months ended January 31 1982 special non-recurring charges of £40,900

Turnover showed an increase from £3.78m to £4.89m. Providing for tax of £67,466 (£941), the net profit comes out at £315,076 (£298,303). Earnings per 25p share are stated at 12.12p (11.47p).

The turnover figures have been adjusted to the basis that the new terms of trade had been in operation throughout 1980 and 1981, the directors state. This change had no significant effect on

The principal ectivities of the group consist of the sale outside Spain of pyrites purchased from Compania Espanola de Minas de Tharsis and land developments, building and agriculture in

dend but the chairman bopes that circumstences will justify a were incurred on the rationalisa-tion of production facilities. on of production facilities. final—for 1980-81 a single pay Mr. Rupert Hunt, chairman. meot-of 0.4p was made. Losses says that the benefits from for the year amounted to savings to date will progressively belp efficiency and there are of £263,000 compared with a profit of £260,000 in 1979-80.

COST cutting measures under-taken by W. A. Tyzack, which started to benefit the precision engineering component group is slowly but steadily improving

Cost cutting measures

benefit W. A. Tyzack

Sharna Ware improvement DOUBLED PROFITS in the second half bas enabled Sharoa final of 2.0691p. But are making ware to produce a pre-tax figure a scrip issue of one-for-one. of £542,864 for the year ended 1981, compared with £793,056, However, the result is still well sbort of the £1m acbleved in

1979. The directors are maintaining

RECENT ISSUES **EQUITIES**

Issue price P	20	Latest Renund-	18 High	82 Low	6tock	Closing prios	+ or	olvi p.	Covered	Viole	Retio
15 102 80 		86/3 15/4 	81a 25 155 370 25 38 95 275 134 63 170 42	18 188 316 21 87 275 127 47 157 5912 138	AIM Greup 10p. Amersham Cambrian & Gen. 7ip Ilew (George). Fildridgs Pope £1. Flest Holdings 20p. Greenfriar Warrants Filmm. 8us. Sys. 10p Filses Brilling. Leisure Inds. Maiayslen Tin 6p. POsprey Assets P. H. Industriais Standerd Secs. Fyork Mount. Zambla Cone Cpr 10K	205 25 159 570 38 92 875 152 50 165 591 ₂ 140		b17.5 b5.0 bd1.5 F1.4 bS.5 b2.8 4.51	8.3 2.9 8.3 2.8 4.7 1.2	2.4 16 6.9 6 5.7 11 	5.5

FIXED INTEREST STOCKS

pare price parent	High Low	Stock .	School + et
\$100 £25 100 F.P. \$100 £10 100 F.P. \$99.539 £50 \$100 F.P. \$100 F.P. \$100 F.P. \$100 F.P. \$20	14/4-116 111 24/6 101 ₂ 101 ₃ 28/3 103 98 	Barclays 16% Ln. 2tk Boddingtons Brew 9125 Cnv. Ln. 2000.05 Bristol Weter 9% Pref. Hunting Pet. 10% Cnv. Ln. 1227 Int. Bank 14% Ln. 1927 Lee Valley 915% Red. Prf. 1982 Mellenwide Bdg. Soc. 1414% 1415.65). Do. 1414% (44485). Ropnem 1112% Cum. Prf. Trans-Canad Pipelines 161% Hotes 2007.	10 g 99 22 sg 1154 100 a - 1s
	4.710		

"RIGHTS" OFFERS

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Da			***	ma Day Ja		les decles fore of any			

Renunciation date usually last day for dealing free of stamp duty. b Figures based on prospectus estimate. d Olvidend rete paid or payable on part el capital; cover based on dividend on full capital. g Assumed dividend and yield. r Indicated dividend: cover relates to previous dividend. F/E ratio based on latest simulal semilings. u Forecast dividend: cover based on previous year'e earnings. F Dividend and yield based on prospectus or other official estimates for 1952. Q Gross. T Figures assumed. Φ Figures or report awaited. ‡ Cover ellows for conversion of sheres not now ranking for dividend or ranking enly for restricted dividends. 5 Pacing price. p Pence unless otherwise indicated. ¹ Issued by tender. || Il6ered to holders of erdinary shares as e "rights." ** Issued by way of capitallection. §§ Reintroduced. ↑ Issued in connection with reorgesization, merger or take-over. || Eletroduction. || Issued to former praference holders. || Alleiment latters (or lully-paid). • Provisional or partiy-paid elferment letters. || With warmnis || 12 Dealings under special Rule. • Unilisted Securities Markot. † London Listing. † Effective issue price efter acrop. I Fermerly death in under Rule 163(2)(a). † † Unit comprising five ordinary and three Cap shores.

MANNIN DIAMOND INVESTMENTS LIMITED Bld: 400 Offer: 440 Tel: 0624 822091

Talex: 628032 MANNIN G

THE TRING HALL USM INDEX 121.6 (+0.3) close of bosiness 2/4/82 BASE DATE 10/11/80 100 Tel: .01-638 1591

The group, which makes plestic were and operates in cash end carry merchanting, has a

the says he is encouraged by the current order trend "wbich is slowly but steadily improving from the exceptionally low levels of last year." The order book now stands 10 per cent bigher and the chairman is confident their the improving trend of results will experience.

There is again no mterim divi-

of results will continue.

healthy level of liquid funds and continues to take a positive attitude towards realistic economic growth, the directors state. Construction of the new cash and carry building is on target and it will commence trading later this year. It should provide worthwhile extension to the profitability of the cash and carry division, they claim.

They feel that resources of

that division are more effectively applied to a larger type of unit, and therefore have decided to cease trading from the 14,000 sq cease trading from the 14,000 sq ft unit in Glasgow. Profits from that area have during recent years been "wholly inadequale" and continuction connot be "economically justified."
Turnover for the year rose by £1.48m to £17.350. After tax of £163,502 (credit £614.460) the net

came out at £379,362

Setback at Gibbs and Dandy

A slight downturn from £240,378 to £237,810 in the second balf is reported by Gibbs and Dandy, the Luton-based builders' merchant, ironmonger, tool merchant, and electrical whole. merchant and electrical whole-saler. Figures for 1981 as a whole were also lower as a whole were also lower at £349.000 compared with £414,000.

At the halfway At the halfway stage, when profits were down from £173,722

to £111,190, the directors said the general recession was a major factor in the reduction of net profitability. They said the coo-struction industry had continued to be affected by lack of capital investment, a situation which seemed unlikely to improve in the foreseeable future.

There was a fall to turnover. which was down from £14.65m to £14.01m.

The dividend is raised from 1.25p to 1.4p, and stated earnings per 10p shere improved from 3.9p to 4.6p. There was a tax credit of £27,000 (£177,000). On a CCA basis. attributable profits were £226,000 against £308,000.

MIDLAND NEWS ASSOCIATION (newspaper publisher).—Results for year to January 2, 1982, already known. Sharcheldem' funds £11.64m (29.98m); fixed espects £10.89m (£8.78m); current essets £5.18m (£4.52m) including bank balances and cash £9.000 (£794.000); current liabilities £4.26m (£2.63m). Moating: Wolverhampton, April 21.

LADBROKE INDEX Close 570-575 (+4)

M. J. H. Nightingale & Co. Limited

27/28 Lov	at Lane London EC3R	8EB		Teleph	nne	01-621	1212
						P/	
£000'e			Снепае	Grees	Yield		Fully
capitalicali	вя Сотрапу	Prica	en week	div.(p)	9:	Actual	TREED
1,293	Ase. 8rlt. ind. CULS	130	+ 1	10.0	7.7	_	_
4,226	Airsprung	73	_	4.7	6.4	11.8	16.0
1,125	Armitage & Rhedes	46	-	4.3	9.5	3.8	8.5
12,281	Berdon Hill	201	+ 3	9.7	4.8	9.8	11.8
1,33B	CCL 11pc Cenv. Prel	107	_	15,7	14.7	_	_
4,798	Debomh Services	62	- 1	6.0	9.7	3.1	5.8
3,984	Frank Horsell	125	- 1	8.4	5.1	11.3	23.1
10,979	Fraderick Parker	76	– 2	6.4	8.4	3.8	7.4
996	Geerge Sleir	54	- 2 + 1		-		.—
3,940	Ind. Precision Costings	97	_	7.3	7.5	7.0	10.5
2,616	leis Conv. Pref	109	· + 1	15.7	14.4	_	_
2.454	Jackeon Group	97	_	7.0	7.2	3.1	6.8
15,872	Jemes Burrough	115	- 1	a.7	7.8	8.4	10.6
2,489	Robert Jenkine	244	- 6	31.3	12.5	3.4	5.6
3,180	Scruttone "A"	64		5.3	S.3	9.8	8.1
3,881	Terday & Carliele	159		10.7	6.7	3.1	8.5
2,982	Twinleck Ord	14	_	_	_	_	_
2,184	Twinlock 15oc ULS	80	+ 022	15.0	18.8	_	_
3,815	Undock Heldinge	25	_	3.0	12.0	4.5	7.8
10, 140	Weller Alexander	80	+ 1	6.4	8.0		9.3
6,344	W. 5. Yestas	228	d – 2	14.5	5.3	6.0	12.0

Mills Fary

FINANCE FOR INDUSTRY TERM DEPOSITS.

Deposits of £1,000-£50,000 accepted for fixed terms of 3-10 years. Interest paid gross, half-yearly. Rates for deposits received not later than 181 131 131 131 131 131 131 Deposits to and further information from The Treasurer, Finance for Industry pic. 91 Waterloo Rd., London SEI 8XP (01-928 7822, Ext. 367).

Cheques payable to "Bank of England, a/cFFI" FFI is the holding company for ICFC and FCI.

Public Works Loan Board rates

Effective March 27 Over 5, up to 6 Over 6. up to 7 Over 7. up to 8 Over 9, up to 9 Over 10, up to 10 ... Over 10, up to 15 ... Over 15, up to 25 ... Over 25 Over 8, up to 9

*Non-quota loans B are 1 per cent higher in each case than non-quota loans A. † Equal instalments of principal. ‡ Repayment by balf-yearly annuity (fixed equal half-yearly payments to include principal and interest). § With half-yearly payments of interest only.

LOCAL AUTHORITY BOND TABLE

Authority (telephone number in parentheses)

Annual Interest gross pay Minimum of able sum poss £ Year

Knowsley (051-548 6555) 137 }-year 1,000

INTERNATIONAL BONDS

Offered only business in Mexican floaters

AT FIRST there were only rumous: In hished tones dealers in the Eurodollar floating rate note market passed the word that they were pulling out of trading Mexican paper. But now the rumours have been confirmed as reality: A number of the leading dealers have stopped making a market in Mexican floating rate note issues (FRNs)

Although the cessation of such trading is not of major consequence to the entire Euromarket, it can do little good for the gradually deteriorating name of Mexican borrowers in both the bond and credit

The main reason for the recent halt by several marketmakers is the growing illiquidity of Mexican floating rate notes. There are several factors

ted

iTS.

• The economic image of Mexico has become tarnished over the past few months in view of the fall in its oil price, the devaluation of its currency and the country's growing budget requirement.

Many banks, the ultimate buyers of the FRNs, are "full are likely to stay low and the up" with Mexican paper. "We liquidity therefore nearly disare up to our eyebrows," com- appears. mented one banker.

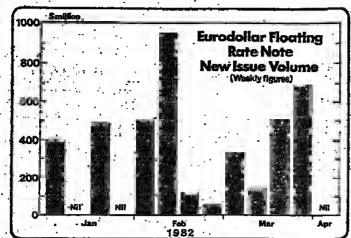
and least liquid paper and move to other issues. Mexican paper has suffered.

The effective margins on Mexican floating rate note paper have risen and the prices have fallen correspondingly. - Many . investors bave switched to higher yielding fixed rate Mexican paper such as the recent 171 per cent Banobras

Some Euromarket houses have decided to support only the Mexican FRNs they have

The result of all this is that the trade in Mexican FRNs is. no longer a two-way business. Several traders report that business has turned into 'offered only."

Six months ago the average spread of a standard Mexican floater may have been around 0.45 to 0.50 per centage points above the London interbank offered rate (Liber). But now the offered price of several issues is putting the spread closer to one per centage point.



1986 paper, one of the few issues still being traded. The notes carry a 1 point sperad above Libor, and are trading currently in the 971 to 971 range. At 971 the effective i point on average last week. The benchmark 1988 6.1 per cent paper closed the week i paper issued by foreign borrowers—enjoyed a week of firmer trading and closed f to f point higher. spread comes to nearly one per-centage point.

When prices fall the trading liquidity may dry up. When the market expects a spread of around 1 per cent the prices

mented one banker.

The recent surge in new FRN said on Friday: "There seems issues (see chart) has led some to be a complete lack of custements to cut their weakest tomer interest in Mexican paper." Several competitors agreed and said the short-term outlook was not expected to

change.

In the fixed-rate Eurobond market the first day of April brought a surge in investor demand. After a sluggish start last-week the Eurodollar sector rebounded on Thursday and Friday and closed the week points to 1 points higher. The Euro D-Mark sector continues to be strong; prices were up I point on the week. The Swiss franc sector saw prices up a points on the week.

In the Eurodollar market, the expectation of a decline in U.S. money supply beartened the market and by Friday Euro-bankers reported a firm under-

Despite the flurry of activity late last week an increasing number of Euromarket partici pants are now shelving hopes of an early decline in dollar interest, rates:

On the other side of the world bove Libor. the Japanese government bond An exemple is the Nafinsa market saw prices fall by around

Belgium tests the waters

above the London interbank of organising that country's debt offered rate (Libor) will be } per cent and the deal is fully underwritten and in syndication. The other banks involved are Barclays Bank, Royal Bank of

Canada, Daiwa, Saltama Bank, Banqoe Belge Limited, and Banque Bruxelles Lambert It is well known in the Euromarket that Belgium has been contemplating a jumbo credit and this comparatively small deal may be a way of testing the

waters.

attention.

samural bonds Japanese yen

A number of buyers seem to be getting into samural bonds

while the yen is weak, taking

a view on its future apprecia-

tion. Bargain bunters are also moving into samurai bonds

rather than Japanese Govern-ment securities in an effort to

achieve a higher yield.

Elsewhere in Europe the action shifts tomorrow Dresdoer Bank's Frankfurt offices in Juergen-Ponto-Platz where more than 100 bankers and Polish officials will converge at 10 am to sign Poland's 1981 debt rescheduling agreement. But as the bankers gather in Frankfurt, there are other matters in Eastern Europe which may soon merit their

The Euromarket was awash with rumours on Friday of a large loan from the Western European central banks to Hungary. On Friday evening Mr Janos Fekete, first vice-president of the Hungarian National Alan Friedman Bank, is said to have stated he

THE KINGDOM of Belgium is borrowing £100m through a five-year sterling syndicated credit managed by Hill Samuel and Baring Brothers. The margin

rescheduling.
In Lisbon, the much waited mandate for Portugal's \$300m eight-year credit was awarded to a group of ten banks. Citicorp agent and Lloyds Bank Inter national is running the books. The other banks are the Bank of Tokyo, Full Bank, Industrial Bank of Japan, Banque de l'Indochine et de Suez, Commerzbank, Gulf International Bank, National Westminster Bank, and the Banco Portugues do Atlantico.

The Portugues do Atlanto.

The Portuguese have also negotiated a £25m acceptance credit for CNP, the state-owned petrochemical company. The two-year credit, bearing a per cent acceptance commission, was placed by Lloyds Bank International national.

Pemex's \$2bn jumbo was signed

Pemex's \$2bn jumbo was signed late last week, but the Mexican oil company also attempted a \$200m ciub deal throogh Banamer. This was withdrawn by Friday, only a few days after reports of it first emerged.

The \$200m two-year Eurocredit was viewed by some bankers as a curious "second bite of the cherry". It was in the pipeline before the ink was the pipeline before the ink was even dry on the \$2bn deal, and while Nafinsa's \$1.2bn credit was

ASIAN CURRENCY UNITS

اهكدامن الدُّجل

Singapore undeterred by Hong Kong's relaxation

markets are shrugging off sug- great enough to ensure that market. Thus spreads on loans gestions that business will suffer from Hong Kong's recent abolition of its 15 per cent withholding tax on interest payments. Official statistics over the next six months or so will has recently reported a slight some countries will find themshow how much business may

be leaving Singapore, as maturities fall due. Neither the foreign bankers nor the Singapore authorities are expecting found other ways of making this to be a flood, although money may have to decide older bands point out that it whether to content themselves was in large measure the Hong Kong withholding tax that prompted the development of foreign bank's Asian Currency Umits (ACU's) from 1968

It seems likely now that there will be some blurring of the traditional distinction between the two centres—where Hong Kong has tended to set up a loan syndications, Singapore bas been used as a funding centre, a shorter-term money market, and a centre for the issue, mainly though not exclusively by Asian borrowers, of certificates of deposit, bonds and notes.

SINGAPORE'S offshore financial banking community is probably entangle from those of the Eurobusiness in Singapore will con- to many Asian borrowers have tinue as before. Whether all are been uncomfortably narrow for making money is a moot point, many bankers recently, while for Only one (a well-known German the future, risk is being far bank active in the gold market) more carefully assessed and loss. Yet many banks are selves being asked to pay more expected to find their money Yet bankers are confident that year, and those which have not with a mere presence in the still

> Forecasts for the current year are mixed. During January, the latest month for which the Monetary Authority of Singapore has published statistics, total assets and liabilities of the ACUs actually fell from an average of US \$55 km. to average of U.S.\$85.8bn to U.S.\$84.8bn. This is the first time the market has so much as paused for breath in five years of rapid expansion. Some bankers think a plateau has now been reached, and not everyone is sure that volume will hit the U.S.\$100bn mark in 1982.

rapidly growing South-East Asia

AS Singapore is quick to ACU's now number almost 200 acknowledge, much of this in Singapore, with newcomers business is merely "booked" to still arriving, and the collective ACUs by their parent banks Alan Friedman investment this represents on elsewhere, so that the market's the part of the international fortunes are impossible to diselsewhere, so that the market's

Yet bankers are confident that market business contracting this the rapidly expanding economies Indonesis Thailand, and the Philippines, will all continue to have a hearty appetite for funds. As a seasoned European banker put it, "the problem for us will

be to pick the good projects."

The Asia bond market, mean while, remains closely bound to U.S. dollar interest rate movements elsewhere. Dealers say there is plenty of pent-up demand for funds on the part of the Asian borrowers who have been the beaviest users of the market-mainly because their greater recognition in Singapore means they can secure better terms than in Europe. The market has been less inclined to innovate than London, but a recent U.S.\$18m note issue with warrants attached by DBS-Diawa for Seiyu, the Jspanese stores group, went quickly and is expected to set a trend for new

borrowing instruments.

Adrian Dicks

MARCH 1982

CURRENT INTERNATIONAL BOND ISSUES

STERLING

						. COMMENT IN	
Bortowers U.S. DOLLARS	Amount m.	Maturity	Av. life years	Courpon %	Price	Lead manager	Offer yield
CNT†‡	275	1990	8	514	100	Societe General	5.250
Natomas¶‡	50	1985	3	15	100	Morgan Guaranty, SBCI, Salomon Bros	. 15.000
S. Carolina Electric and Ga	s 60	1989	7	15}		Kidder Peabody Intl.	
Bank of Americat	300	1987	5	12	90 1	Bank of America Intl., SBCI	.14.820
Georgia-Pacific 11 Bank of America	50	1987	5	14	100	Blyth Eastman Paine Webber	14.625
Transco intl.12	50	1987	5	15}	100	CSFB, Merrill Lynch, Lazard Freres NY	15,250 .
CANADIAN DOLLARS							
Simpson-Sears Acceptance:	40	1989	7	16}	100	Wood Gundy	16.750
Credit Foncier Canadat	30	1989	7	17}	100	Societe Generale de Banque, CSFB	17,125
Ville de Longueull‡	- 10	1988	. 6	17	100	Kredietbank	17.000
Montreal Transport	. 20	1987	5	76}	*	Banque Intl. à Lux	. *
D-MARKS							
Asian Devt Bankt	150	1992	10	91	99}	Deutsche Bank	9.330
Eurofinia‡	100	1992	70	9	991	Deutsche Bank	9.080

Borrowers SWISS FRANCS	Amount m.	Maturity	Av.life years	Coupon %	Price	Lead manager	yiel %
World Bank**‡	300	1987		7}	700	CS	7.250
Sekisui Prefab Homes 11	78	1992	_	52	100	UBS	5.750
LADB‡	100	1992		· 7	100	UBS	6.964
Aucalsa	80	1992 ·		8	*	CS	*
CNET	100	1992	_	7	1001	Soditic, Credit Lyonnais	6,930

Pemex‡	30	1987	5	164	· 100	Hambros Bank, SBCI	16,500
Credit Foncier de France‡	50	2007	25	143	99,393	Morgan Grenfell, County Bank	14.850

KUWAITI DINARS Richardson-Vicks‡ KFTCIC, KIC, KIIC 12.250

All of these Securities have been sold. This announcement appears as a matter of record only.



U.S. \$75,000,000

Wells Fargo International Financing Corporation N.V.

15% Guaranteed Notes Due 1987

Guaranteed as to Principal and Interest by

Wells Fargo & Company

MORGAN STANLEY INTERNATIONAL

ARAB BANKING CORPORATION (ABC)

BANQUE NATIONALE DE PARIS

COMMERZBANK AKTIENGESELLSCHAFT

CREDIT SUISSE FIRST BOSTON

DEUTSCHE BANK AKTIENGESELLSCHAFT

MORGAN GRENFELL & CO.

MORGAN GUARANTY LTD

SALOMON BROTHERS INTERNATIONAL

SOCIETE GENERALE DE BANQUE S.A.

SWISS BANK CORPORATION INTERNATIONAL

UNION BANK OF SWITZERLAND (SECURITIES)

WELLS FARGO

NEW ISSUE

The Debendures have not been registered under the United States Securities Act of 1933 and may not be offered or sold ntures having been sold, this autouncement appears as a matter of record only.

U.S. \$400,000,000

American Telephone and Telegraph Overseas Finance N.V.

14%% Guaranteed Debentures Due 1989

Unconditionally guaranteed as to payment of principal, premium, if any, and interest by

American Telephone and Telegraph Company

Credit Suisse First Boston Limited

Algemene Bank Nederland N.V. Banque Nationale de Paris Deutsche Bank Aktiengesellschaft Manufacturers Hanover Limited Morgan Guaranty Ltd. Salomon Brothers International Société Générale de Banque S.A.

Banque Bruxelles Lambert S.A. Banque de Paris et des Pays-Bas Goldman Sachs International Corp. Merrill Lynch International & Co. Morgan Stanley International J. Henry Schroder Wagg & Co. Limited

Swiss Bank Corporation International Limited

		Union Bank o	f Switzerland	(Securities)	Limited		
American Express Bank	Auro Internation	airl Amb	old and S. Bleichroede	r, loc. I	ache Halsey Stuart Shields	: Julius	Beer International
Banca Counsesciole Italiana	Banco del Go	tardo Benk	of America Interaction	and The Ba	uk of Beranda, Ltd.	Bunk Controls	Switzerland (C.L)
Buck für Geneiswirtschaft	Bank G	nteniller, Kmr., Bange	ser (Oversens)	Bank Ler	International Ltd.	Bunk Len	ni le-Israel Group
Bank Mees & Hope NV	. Bank of 7	okyo International	Benk	kens Gebrider Boths	enis : Ber	ngue Française do Co	amerce Extérious
Bunque Générale du Lexember	mg S.A.	Ranque de l'Indochie	e et de Seez	Busque Interne	diosale à Lexambourg S.A.	. Ban	que Louis-Dreyfus
Banque de Norffize, Schlamber	ger, Mallet Bases	n de Paris et des Pays	Bas (Stime) S.A.	Banque Populaire S	Stiese S.A. Lexembourg	Banque Privée de	
Banque Reflechild	Raugue Scanilina	re en Seisse	Banque de l'Un	ion Européenne	. Bengue Worms	Bat	cleys Benk Group
Bering Brothers & Co.	Bayerische Hypothek	en- und Wechsel-Benk	Bayerische I	andesbank Girozzate	nio Bayerkehe Ver	einsbook B	eer, Steeres & Co.
Jok. Berenberg, Gostler & Co.	Berger 1	Sank Ber	Ser Busk	Bediser Handels	and Frankfarter Bank	Blyth Easts	nan Paine Webber
B.S.I. Unicremiers	Crisse des Des	des et Consignations	Caze	pere & Co.	Christiania Bank e	g Kreiitkasse	CIBC
Cimilien Benk Co	iner cheek	Continental Illhois	Copenhage	z Handekbank A/S	County Bank,	Crédit Con	mercial do Franco
Cristit Industriel et Commercia	d . Crédit La	rotunals Cre	dif Saisse First Boston	n (Asia) C	reditamiali-Bankverein	Dal-Teld Ka	ngyo International
Daira Europe Dellris	ik & Co. Den	orske Creditlank	Deutsche Gin	ozentrale	The Development Bank of	Singapore Des	DG Benk
Diller, Read Oversers Curpers	tion Demision	Securities Ames	Drendner Bank	Drexel Burnhar	Lambert Effecter	nbank-Warburg	Enropobiliaro
Enropean Benking Company	Foll Internal	ional Finance	Genostenschaftlie	be Zentralbank AG	Girozentrale ma	Bank der österreich	ischen Sparkassen

U.S. BONDS

Market nerves still fraught

regarded junior college in Nortool in an earlier edition."

Amid all the doom and gloom, Wall Street found something to chuckle about this week: a apoof of its daily required read-ing called "Off the Well Street Journal" which reported that takeover-happy Mobil had accidentally bid for a company it already owned, along with the tragic tale of a robot in a Japa-nese auto plant which committed hara kiri because its poor memory circuits made it forget the company song,

But for those who can teli a debenture from a set of false teeth, it was another frustrating week of seesawing prices but no fundamental change. Bond prices weakened and then atrengthened a little. Bui short stubbornly bigh and prevented whatever bullish impulses there were froot making any headway. Fed funds averaged nearly 16 per cent, some two points higher than the week before as endof-quarter pressures clogged up

the banking system.

The sherp drop in the money supply on Friday was a nice piece of news to go home with for the weekend. M1, the maio measure, feil \$3bo. But it had been anticipated, and left the market little changed. The major worry remains the big bulge which has been predicted for the middle of this month when people liquidate investments in advance of the April 15 tax payment deadling.

Nor was there much encouraging news from Washington, where Congress broke up for its two-week Easter recess without beving made any progress on the budget. Even though President Reagan said at his press conference on Wednesday night that he was not being an inflexible "stone face," it is still far from clear where compromise cao be reached to narrow the \$100bn plus budget gan that looms about

gap that looms ahead.
The Federal Reserve Board held another of its closed door policy-making meetings last week, the results of which will not be known for some time. However, as is customary, the Fed released the minutes of its previous meeling in February which showed that it was hoping

"A CONVERTIBLE subordinated debenture is a highly the belence of the January. March quarter to offset the buge way. It was incorrectly iden-tified as a corporate investment Broadly speaking, this has tool in an earlier edition." Broadly speaking, this has happened, though M1 remains slightly above target.

Given the weakness of the economy, the Fed is expected to try and avoid pushing up interest rates in the next few weeks, even if this produces some sweaty moments 6s the money supply shoots up. This wes the strategy it adupted during the January hulge when the crisis eventually blew over. With unemployment now 9 per cent, matching its highest since war, the best that can be said about the economy is that the recession may have boltomed out, though this has yet to have much effect on

interest rates. With the merket in such a nervous state, zero coupons issues continued to be the best bet for borrowers. Bank of America sold its \$500m of small denomination notes aimed at the individual saver, and Allicd Stores announced a similar

Pepsico, the soft drinks company which set off the fashion for zero coupon notes last year. sold \$850m more of them in a series with maturities ranging from six to 30 years, which is thought to be the longest maturity yet on a zero coupon issue.

Du Pont, the large chemical company which has huge finan-ing needs following its recent acquisition of Conncon, tnok advantage of the new Shelf registration rule to file for \$1bn of debt securities which it will sell periodically. The rule allows borrowers to make a single filing for several proposed debt issues, rather than file singly for each one. Apart from saving time and money, this enables the borrower to move swiftly if a borrowing window opens up in the market—some-

David Lascelles

U.S. INTEREST RATES (%)

New issues boost for fund totals

NEW FUNDS raised on the international capital markets rose by more than 50 per cent in the first quarter of this year to \$39.5bu, from \$26bn in the first quarter of 1981, according to the latest figures compiled by the Organisation for Economic Co-operation and Development (OECD).

The rise was due largely to the growth of bond issues in the first quarter. New issues for the first three months of 1982 stood at \$19.1bn against \$8.9bn last year. The OECD says that \$12.4bn

of new funds were raised on the international capital markets in March, a decline of \$900m on the \$13.3bn raised lo February. Of last month's \$12.4bn, 6.3bn consisted of Eurocredits and \$6.1bn of bonds.

The Mexican State oil monopoly, Pemex, has signed an agreement for a \$2bn loan from a \$2 bn loan from a from a group of 132 inter-national banks, it was announced

in Mexico City, reports Reuter.

Pemex said the agreement
was signed in New York by
Sg Julio Moctezuma Cid, bead
of Pemex. and Mr Walter
Wriston, president of Citicorp
International, lead manager of
the syndicated loan the syndicated losn.

European chief

• GENERAL FOODS CORPORA-

for General

Foods Corp.

Barlow Rand move to take Storting decision control of Tiger Oats

and mining conglomerate, Barlow Rand. At the centre of the arrangements is the formetion of a new company to be called Tiger-Sugar which will control the entire capital of C. G. Smith Sugar and more than 50 per cent of the issued capital of the food group, Tiger

Present shareholders in Tiger Oats are to be offered one new share in Tiger-Sugar for each Tiger Oats sbare they hold. The Old Mutual, which is South Africa's largest life assurance company and which holds 40 per cent of Tiger Oats' equity, has agreed to take Tiger-Sugar shares for its entire holding. In addition, the Old Mutual

has accepted the second leg of the basic deal offered in Tiger Oats aharebolders, which is to exchange half the Tiger-Sugar sbares it receives for new Bar-

president of General Foods Corporation and president of General Foods international operations at its headquarters in

White Plains, New York.

Herr Helnz Ruhnau, Secretary

deputy chairmao.

• Mr Ernest Hauser, chairman

and managing director of Silber-warenfabrik Jezler and Cie, Dr David Linder, chairman and

managing director of Danzas AG, and States Couocillor Franz Muheim, chairman of Schindler

thiding, have been appointed to the board of SWISS BANK CORPORATION, Basie, Mr Jean Bonnard has retired from the

IN A complex series of deals 11.5m ordinary shares in issue by Barlow Rand. Because of which will tie up control of as well as 1.8m automatically this, Barlow is to offer to the last remeining independent convertible preference shares. exchange up to 50 per cent of major food company in South All of these are included to the each minority shareholder's Africa, control of Tiger Oats arrangements. C. G. Smith interest in ICS. is to be taken by the industrial Sugar is a wholly-owned sub-Barlow Rand will then schange the Tiger-Sugar, sidiary of C. G. Smith which, in lurn, is at present a 54 per centowned subsidiary of Barlow

> In the secondary deal between Barlow Rand and the Old Mutual, the assurance company is to receive an additional 11.4m new Barlow Rand sbares exchange for a portfolio of Portland Cement, 265,000 Transvaal Consolidated Land, 4.5m Nampak, 0.53m Reunert and Lenz and 7.11m Imperial Cold Storage (ICS). With the excep-tion of the latter, all these companies are members of the Barlow Rand group.

sbares, Barlow Rand receives from Old Mutual and which represent 27 per cent of the food company's issued capital, low Rand shares on the basis of a further 20 per cent of ICS two Barlow Rand for each is owned by Tiger Oats. The Tiger-Sugar. overall effect is that ICS

exchange the Tiger-Sugar, Nampak and ICS shares accruing to it for an issue of new C. G. Smith shares. The end result will be that Berlow Rand will own more than 54 per cent of C. G. Smith which in its turn will have more than 50 per cent of Tiger-Sugar, 75 per cent of Nampak. a direct stake of more than 27 per cent in ICS. shares which comprises 186,000 more than 27 per cent in ICS, C. G. Smith, 1.35m Pretoria and a further 20 per cent of and a further 20 per cent of ICS indirectly through Tiger-Sugar and Tiger Oats.

At present. Barlow Rand has

126.2m ordinary shares in issue which have a total market capi-talisation R1 230m. In the year ended September 30, 1981. Apart from the 7.11m ICS over was R4.572m and its pre-bares, Barlow Rand receives tax profit R653m. C. G. Smith has 33.7m ordinary sbares in issue which are worth R590m on last Friday's closing price. ow Rand shares on the basic of a further 20 per cent of ICS In the year ended September 30 wo Barlow Rand for each is owned by Tiger Oats. The 1981, its consolidated turnover iger-Sugar.

overall effect is that ICS was R1.2bn and its pre-tax At present Tiger Oats has becomes controlled indirectly profit R196m.

on Reksten still leaves option open

BY OUR OSLO CORRESPONDENT

THE REKSTEN AFFAIR is not years out of Norwegisn politics, even if the Storting (Parliament) transfer early on Friday morning of asset endorsed an agreement between \$40m. the Norwegian states and Hambros Bank, London, which is to reduce the losses Norway

power in Norway is expected to present a report on the Reksten Affair later in the year, and it be thoroughly debeted in the Storting. According to the endorsed agreement, the fiercest in Norwegian politics is believed that this report will endorsed agreement, the Norwegian state has relinquished legal claims against Hambros in connection with the affairs based on information obtained at present, but will be free to take legal steps against the bank on the basis of

revealed by the investigating committee but legal experts in Norway have stressed that

The agreement involves the transfer by Hambros to Norway of assets amounting to about

Government wanted to sign this Hambros Bank, London, which is to reduce the losses Norway is suffering in connection with cal parties to both the left and An investigating committee appointed last year by the labour Government then in ment because they thought it would damage the Norwegian states' reputation in the eyes of foreign banks, financial institutions, and companies in

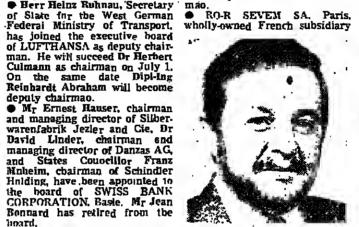
fiercest in Norwegian politics for many years—the agreement was endorsed with a majority of one. During the debate Mr Arne Skauge, the Minister of Trade and Shipping was in particular subjected to bitter criticism, claiming that he had

inck I

committee but legal experts in
Norway have stressed that an
eventual court case against
Hambros should lest for several

INTERNATIONAL APPOINTMENTS

executive officer. He had formerly been president and chief operating officer. He succeeds Mr William D. Atteherry who remains as chair-



Mr Gerard Leroux

Mr Ernst Mollet, manager of Swiss Bank Corporation, has of Rubery Owen-Rockwell, UK succeeded the late Mr Peler Stern TION bas appointed Mr Joho M. as vice-chairman of the chamber Keenan, group vice-president, as president of General Foods Europe, Brussels. He succeeds Mr Ervin R, Shames, who was recently elected executive vicebased trailer axle and suspension manufacturer, has appointed Mr Gerard Leroux as operations He comes from director.

OEUTSCHE MARK STRAIGHTS

WISS FRANC

Ansett Transport 71, 92 Asien Oev. Bank 6 90 Australia 61, 93

Australia 6% 93
Australia 6% 93
Belgslectre 71, 21
Bell Canada 74, 93
Bat de Autonictas 8 90
Co-on Nenmark 6% 92
Denmork 74, 91
FIB 74 92
FNEL 8 92
FNEL 8 92
FNEL 8 92

First City Fin 6% 93 Janan Air Lines 7% 91 Manioha 7 92

Manticha 7 92
National Pwr. Co. 8 92
National Pwr. Co. 8 92
Nicron T and T 69, 92
DK6 73, 92
Ost. Postsnar 71, 92
Ost. Postsnar 72, 92
Ost. Postsnar 72, 92
Ost. Postsnar 73, 92
Ost. Postsnar 73, 92
Tisnic Finna 8 91
Transcaneda Pica. 7 94
Uniloger NV 71, 93

Inilover NV 71, 93 ...

Belgelectric 11 S1 Comp. Tel. Eso. 102, 92 Oenmerk 18 88 Oenmerk 102, 92 EEC 101, 93 EFC 92, 94 EIB 93, 98

Average prico changes... On day

He is chairman and chief execu-tive officer of La Laurentieooe Motuelle d'Assurance of Quebec

BANKERS TRUST COMPANY has appointed to Loodon Mr John C. Mowinckel. vice-president, who is local functional menager of the bank's world corporate department in Italy. His successor in Milan is Mr Robert M Stephins vice-president was M. Stebbins, vice-president, who was with the bank's subsidiary in

Germany.

PARGESA HOLDINGS SA,
Geneva, has elected Mr Leon
Lambert of the Group Bruxelles Lambert of the Group Bruxenes
Lambert SA and Mr Joseph
Camenzind, a former deputy
director general of the Banque de
Paris et des Pays-Bas (Suisse) SA
to its board. Mr Lambert's election came as Pargesa Holdings,
which acquired a orajority stake
in Parihoe Suisse last October In Paribas Suisse last October before its pareot company Groupe Paribas was nationalised io France, prepared to take an SwFr S0m (£23.2m) share in Groupe Bruxelles Lambert Pargesa Holding Is part of a con-sortium with Cobepa SA, Agfa-Fruchauf France.

Fruchauf France.

Gevaert SA and Frere-Bourgeois replaces Mr F
SA which will take over 33-36 per has resigned.

Lambert next month.

• Mr James Z. Pugash has been elected vice-president sod special assistant to the chairman of OCCIDENTAL

CORPORATION. CANADIAN NATIONAL



RAILWAY bas appointed Mr J. Maurice LeClair as president and chief executive officer from April He will also sit on the com-pany's 12-member board. He replaces Mr Robert Bandeen, who

been elected to the board of cent of Groupe Bruxelles Following the Zambian Gov-ALCAN ALUMINUM, Montreal, Lambert next month. Following the Zambian Governmeot's decision to merge Nchanga Consolidated Copper Mines (NNCM) and Roan Consolidated Mines Limited (RCM), Mr Francis Kaunda, managing director of NNCM, has been appointed chairman and chief executive of ZAMBIA CONSOLIDATED COPPER MINES (ZCCM).

Mr L. C. Mntakasha, managing director of the Metal Marketing Corporation of Zambia, Professor N. M. Siamwiza, professor of chemistry at the University of Zambia, and

at the University of Zambia, and Bir B. R. Kuwani, governor of the Bank of Zambia, have been Bank of Zambia, have been appointed non executive directors of ZCCM.

The FEDERAL RESERVE BANK OF CLEVELAND has appointed Ms Karen N, Horn as its president from May 1. She is the first women president of any of the 12 Federal Reserve Banks. She succeeds Mr Willis J. Winn, who retires. Ms Horn is treasurer of Bell Telephone Comtreasurer of Bell Telephone Com-

pany of Pennsylvania.

PERO-WALLSEND. Sydney, has appointed Mr Allan Gordon Coogan a director to fill a casual vacancy on the board. He is chairman of Nabalco Pty.

All these securities having been sold, this announcement appears as a matter of record only.



Sociétés de Développement Régional

Société de Développement Régional du Nord et du Pas-de-Calais Société Al-acienne do Développement et d'Expansion SAOE Société de Développement Régional du Centre-Est CENTREST Societé de Développement Régional de Lorraine LOROEX Societé de Développement Regional de l'Ouest SOOERO Société de Développement Régional du Sud-Est Société de Développement Régional du Sud-Est Société de Développement Régional du Sud-Ouest ENPANSO SOR Société de Développement Régional du Picardie SDR Picardie Société de Développement Régional du Languedoc-Roussillon SOOLER Société pour le Développement Economique du Centre et du Centre-Ouest SOO ECCO Société de Développement Regional de la Bretagne Société de Développement Regional Méditerranée Société de Développement Régional de Champuene-Ardenne CHAMPEX Société de Développement Régional du Sud-Ouest TOFINSO SOR

£30,000,000 15½ per cent. Guaranteed Bonds 1992

unconditionally guaranteed by

The Republic of France

S. G. Warburg & Co. Ltd.

Banque Nationale de Paris Banque de Paris et des Pays-Bas Société Générale County Bank Limited Credit Lyonnais Banque Bruxelles Lambert S.A. Goldman Sachs International Corp. Kleinwort, Benson Limited. Morgan Grenfell & Co. Idmited Lloyds Bank International Limited Morgan Guaranty Ltd. Nomura International Limited

Swiss Bank Corporation International Limited

DC BANK Société Générale de Banque S.A. — Société Sé

FT INTERNATIONAL BOND SERVICE

	U.S. OOLLAR		Change on	Change on
		Issued	Bid Offer day week Yield	YEN STRAIGHTS Issued Bid Offer day week Yield
	Anheuser-Busch 161, 88		1021, 103 +01, -01, 15.73	Asian Osv. 6k. 8's 91 15 100 101 0 0. 8.17
	APS Fin Co 174 26	60	1043 7053 0 -03 15.57	Finland, Rep. of 84 97 15 100 101 0 0 . 8.24
	APS Fin Cp 164 29	75	1023 1033 +03 -03 15.47	Int Amet. Dev. 57 91 15 102 103 0 +04 6.47
	Armeo 0/8 Fin. 13 & 36		98 994 +04 -14 15.53	Japan Aitinos 71 87 6 974 98 +04 -04 6.45
	ATT 144 89		1004 1005 +04 +07 14.15	
		225		
ı	Baker Int. Fin. 00 92		241 251 0 +01 15.09	Average price changes On day 0 on week +01
i	Bank Montreal 1974 91	150	1021, 103 +01, -1 15.63	
ł	6r. Colum Hyd. 1514 88		1023 1031 +01 -04 15.45	- Change on
1	6r. Colum. Mfa. 17 97	54	1023 1027 0 -03 16.47	OTHER STRAIGHTS Issued Bid Offer day week Yield
ı	6urroughs Int. 15% 88	50	1001 101 +01 -01 15.53	Can. Utilities 17 96 CS 50 1977, 981, 0 -04 17.31
ı	Canadair 151, 87	150	1004 1003 +04 -04 15.37	CIGC 154 89 CS 75 1964 964 -04 -04 16.63
ı	Can. Nat. Rail. 14% 91	100	973 973 +03 -04 15.09	Pancanadian 162 88 C\$ 65 198 982 0 -04 16.88
J	Corolina Power 16 98	60	10314 10314 +014 +01 15.60	Quebec 174 87 CS 50 11034 1044 0 0 19.27
1	Caterpiller Fm. 167, 86		102 1021, +01, -01, 15.86	Queb. Urban 16% 86 CS 20 1100 101 0 -0% 16.50
ı	CFMP 164 96		1011, 1011, +01, -01, 16.42	Tordom Cpn. 1612 88 CS 25 1983, 991, +1 +03, 19.75
1	CI6C 16 87	100	101% 101% -04 -1% 15.53	Transalta 17 89 CS 50 1991, 100 +014 -014 17.03
ı	Citicorp 0/5 16% 66	150	1031 1037 +04 -04 19.48	U. 6k. Nwy. 91, 90 EUA 16 901, 92 -01, -11, 11.22
ı	Citicorp O/S 151, 67	125	997, 1001, +01, +01, 15.46	Algemene 6k. 104 86 FI 60 1011, 102 +04 +1 9.68
ı	ConsGalhurst 171, 88	50	101 2 102 +04 -04 16.96	Amfas Group 124 86 F1 40 1045 1045 +05 -05 10.95
ı	Can. Illinais 15% 89	100	101% 101% +0% -1 15.33	Amro 8ank 12 88 Fl 75 1057 1063 -03 +04 10.12
	Ougon! O/S 1412 88	400	987, 991, +01, -01, 14.66	Amro Benk 12 86 Fl 60 105' 105' +0' +0' 10.36
ı	Oucont 0/5 Cap. 0.0 90	300	33% 34% -0% -0% 14.77	
1	EIB 16% 91	100	1031 1044 +04 -01 15.85	Pierson 10 ¹ 2 86 Fl 50 100 ¹ 2 100 ¹ 2 + 0 ¹ 2 0 10.04 Rabobank 12 86 Fl 50 105 ¹ 2 106 + 0 ¹ 2 + 0 ¹ 2 10.22
ı	EI6 151, 89	150	993 997 +03 +03 15.58	OK6 14 86 FFr 400 90 91 -1 +0% 17.54
ı	Gen. Flec Credit 0.0 92	400	261, 261, 0 -01, 14.39	Solvay of C. 14% 86 FFr 200 91 92 -0% -0% 17.91
1	Gen. Flec Credit 0 0 93	400	231 241 +02 +04 14.08	Acona 14 85 E
ı	GMAC 0/5 Fin. 161 84	300	1011 +01 0 15.79	6eneficial 147, 90 £ 20 1871, 881, +04 +04 16,93
1	GMAC D'S Fin. 19 88	150	1015 1015 +05 +05 19.59	6NP 13', 91 E
i	Gull Oil Fen CO 92	300	254 264 +04 +04 14.91	CECA 131, 83 E 20 941, 951, +01, -01, 14.75
1	Gut1 States 0/5 171, 88	60	103-2 104 +00-2 16.43	Citicorp 0/S 131, 90 E 50 961, 961, +01, +01, 14,30
ì	Japan Airhnes 154 88	53	101 1014 +04 +04 14.88	Fin. Ex. Cred. 134 86 T 15 954 964 +04 +04 19.25
1	Japan Dav. 6k. 151, 87	50	102 10212 +013 +014 14.78	Gen. Elec. Co 124 89 £ 50 234 944 +04 +04 13.86
ı	Nat. 6k. Canada 16 288	40	995 1005 +05 -05 17.16	Hilam Walker 144 86 T 25 97 68 +04 +04 15.11
4	Nat. West 14% 91	100	98 997 + 67 0 14.98	Privatbanken 142 88 f 12 617 927 +04 0 19.88
ı	New Brunswick 164 89	75	1017 1027 +04 -05 15.70	Resd (Nd) NV 161 89 E 25 1001 1021 +01 +01 18.35
ı	New & Lab. Hy. 171, 89	75	1041, 105 0 0 16.06 1045, 1055, +05, -05, 16.15	J. Rothschild 141 90 £ 12 974 981 0 -01 14.58
1	Ohio Edison Fin. 1712 88 OKG 1512 97	75 50	987 987 +01 -01 15.95	Royal Trustco 14 86 T 12 96's 87's 0 -0's 15.09
ı	OKG 15% 97	200	1037, 1037, +04, -07, 16.21	Swed. Ex Cr. 134 88 T 20 964 974 +04 +04 14.98
ı	Pac. Gas & El. 154 89	80	1022 1023 +04 -14 15.12	Eurofima 101 87 tuxFi 500 991, 1001, +01, +21, 10.47
ı	J. C Penney Gl. 00 94	350	19' 20' +0' -0' 14.51	EIB 9's 88 Luxfr 600 96'4 97's +0's +3's 10.51
1	Quebor Hydro 174 18	150	1063 1074 +03 -03 15.72	
1	Oueber Prov. 154 98	150	987 991 +014 -014 15.46	FLOATING RATE
ı	R.J. Rynids. 0/S 0.0 92		241, 25 +01, -01, 15.1B	NOTES Spread 61d Offer C.dte C.cpn C.yld
ı	Sasketchewan 164 88	100	1024 103 +04 -04 15.49	Bank of Montreal 54, 91 04, 99 991, 29/4 17:00 17:18
Į	Saskarchewan 16 89	125	1015 1024 +04 -05 15.53	BL. of Tokyo 54 91 (0) 04 984 987 10/8 134 13.43
ı	Stetsforeten 151, 87	50	991, 995, +01, 0 15.81	Bk. Novo Scotis 54 93 04 994 995 29/4 17.06 17.17
1	6werlen 141, 88	150	954, 954, +04, -04, 16.57	afCE 54 88 04 994 994 29/4 16.94 17.03
ı	Swed Fy Cred 16', 93	75	101 1017, 0 -03, 16.20	BFCE 54 87 04 984 997 27/7 164 19.31
1	Swed Ex Cred 154 88	100	98'- 99 -0'0'- 1S.54	CCCE 54 2002 04 98 98 11/8 14.82 15.08
١	Taxas Fasigin 15% 88	75	101% 102% +0% +0% 15.32	Co-Can Eurafin 512 91 014 9814 9874 14/4 19.98 16.92 Cledit Agricole 514 97 014 9874 9914 24/9 15.44 15.57
ı	7mnscanadn 19 89	100	1004 1014 +04 +04 15.71	
ĺ	WMC Fin 151, 68	50	977, 983, +03, 0 15.91	Credit Nat. 512 94 \$014 9876 9916 9/8 14.98 14.92 Oenmark, Kngdm. of 92 016 9816 9914 25/8 15.44 15.99
1	World Rank 161, 26 World Rank 161, 28	130 100	103% 103% +0% -0% 15.23 103% 104 +0% -0% 15.47	Den Norske Cred. 5- 93 04 974 984 4/2 12.56 13.68
J	World 6nnl 151 86	250	994 997 +04 -04 15.33	Genfinance 54 92 04 994 100 30/B 151 15.54
ı			n day +0% on week -0%	GZB 51, 62 102, 981, 991, B/6 14.94 15.11
ı	OEUTSCHE MARK	,		Ind. Bank Japan 54 88 04 984 994 8/5 13.31 13.45
1	ATO OF UE MINUN		Change on	Liever Fundin 57, 93 501, 99 991, 2974 1713 1726

nges... On day +0's on week +1

Charge on

Issued 2id Offer day week Y

2 50 103's 103's +0's +1'

2 50 103's 103's +0's +1'

100 104 105 +0's +1's 1

100 104 105 +0's +1's 1

100 108 106's 0 +0's 2

50 101 101's +0's +0's 7

150 103's 103's +0's +1's 1

100 108 106's 0 +0's 2

50 101 101's +0's +0's 7

100 101 101's +0's +0's 7

100 101 101's +0's +0's 7

100 102 102's +0's -0's 7

100 105 105's +0's +0's 6

30 102's 102's +0's -0's 7

100 106 106's 40's +0's 7

100 106 106's +0's +0's 6

100 106 106's +0's +0's 6

100 104 104's +0's +0's 6

100 104 104's +0's +0's 6

101's 105's +0's +0's 6

20 1106's 106's 0 -7 8

20 1105's 105's +0's +0's -0's 8

20 1105's 105's +0's +0's -0's 8

20 1105's 105's +0's -0's 8

20 1105's 105's +0's -0's 8

20 1106's 106's 0 -7 8

wadon নি ৪৫	05	982	991, 2	8/6	15.31	15.46	
Toronto Comin'n 5½ 92	034	9814	997, 1	1/B	16%	16.46	
Average price chang	30S	On da	y O pn	Wee	k -0		
			_				
ONVERTIBLE	Cnv.	Cnv.			Chg.		
KONDS	date	price	aid	Offer	dav	Prem	
KONDS Ajinamato 5½ 96	7/81	933				1.52	
Bow Valley Inv. B 95 🗼	4/21	23.12	971	994	+014	65.1B	
Indgestone Trte 5½ 96	3/82	470	881,	88	+14	-0.36	•
anon 6% 95	1/81	829	82	84	-2	12,60	
) siwa Secs. 5½ 96	12/81	513.3	161			-2.99	
ujitsu Fanuc 41, 96	10/81	5641				15.85	
urukawa Elac. 5½ 95	7/81	300	20			-1.46	
lanson O/S Fin. 91, 96	6/81	1.36	192			-3.30	
litachi Cahle 🍕 96	2/82	515	84			3.94	
litachi Cod Con. 5 98	7/81	1612	743			9.45	
ionda Meror 51, 97	3/52	841	74			10,73	
nchcapa 6 95						25.13	
awasaki 51, 96	6/81	229	717.	72%	+ 11	6.66	
Aarui 6 96			90			5.39	
Ainolta Cemoro 5 98	10/81	R26 4	59			23.98	
/Inorco 91/4 87	5/87	A 16			T01.	12.05	
Anrata 54 96	7/81	2188		59		22.89	•
IKK 61, 96	7/R1	190				-10.87	
Ippon Chemi-C 531 .:	m/91	912				9.11	
lippon Electric 54 97						11.92	
rient Finance 54 97			957	977	_ (A)	5.64	
enyo Electric 5 96							
iumilomo Elec. 51, 97			931	70"	T 17	18.93	
umirama Mal. 54 96			967	54	+2.	8.82	
iwiss 6k. Cpn. 64 90						9,55	
Conishiraku 6 90 PM			70			10.58	
ignisnirgen 6 ao 1704 . Ilitsubishi K. B 89 OM			98			1,48	
1115UUISHI A. B 03 UM	2/02	203	34.7	33.5	+02	12.20	

The Financial Times Ltd., 1982. Repressuration

EUROBOND TURNOVER

(nominal value in \$m)						
	Cedel	Euro- clear				
U.S. \$ bonds						
Last week	5.792.8	7,764.9				
Previous week	5,085.5	9,709.6				
Other bonds		•				
Last week	1.416.0	986.6				
Previous week	1,095.2	820.2				

* No information availableprevious day's price.

† Only one market maker

supplied a price. STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Ycn bonds where it is in billions. Change on week=Change over price a week

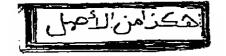
FLOATING RATE NOTES. Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte = Date next coupon becomes effective.

Spread = Margin above six-month offered rate (t three month; \$Bbove meao rate) for U.S. dollars. C.cpn = The current coupon. C.yld = The current

CONVERTIBLE BONDS: De-nominated in dollars unless otherwise indicated. Chg. day = Change on day. Cnv. date = First date for conversion into shares. Cnv. price = Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Per-centage premlum of the current effective price of acquiring shares via the hond over the most recent price of the sbares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by: Krediet-bsok NV: Credit Commercial de France: Credit Lyonnals: Com-mersbank AG; Deutsche Bank AG: Westdeutsche Landesbank Girozentrale: Banque Generale du Luxembourg SA: Banque Internetionale Luxembourg: Kredietbank Luxembourg Algemeoe Baok Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bank of Talvo Interesting Park of Tokyo International; Bankers Trust International; Credit Com-mercial de France (Securities) London: Citicorp. International Bank; Daiwa Europe NV; Deltec Securities (UK); EBC; First Chicago; Goidman Sachs Inter-national Corporation; Hambros Benk; IBJ International; Kidder Peabody International; Manufac turers Hanover: Merrill Lynch; Morgan Stanley International; Nikko Securities Company (Europe); Orlon Royal Bank; Samuel Mootagu and Co.; Scandinavian Bank; Societe Generale Strauss Turnbull; Sumitomo Finance International: S. G. Warburg and Co.; Wood Gundy.

Closing prices on April 2



Ulster TV ahead £66,000

Channel 4 and a substantially

increased rental to the Independent Broadcasting Authority will cost Ulster Television something in the region of £100,000 in the second half of the current year ending July 31 1982, says Mr J. L. MacQuitty,

the chairman.

In his interim statement, he says these costs would not be ber. Despite this, the company, which is the television pro-gramme contractor for Northern ireland, expects television operating profit for the second half to he not less than that for the corresponding period last

The company's interim figures show an increase from £331,000 to £397,000 in pre-tax profits for the half-year to January 31 1982. Investment income, at £71,000, was marginally lower and profits on disposal of investments were well down at £13,000 against £34,000. Turnover rose from £4.37m to £5.32m. The interim dividend is raised from 3p to 3.3p — last year's total was 6p

profits increased from £225,000 to £313,000, but Mr MacQuitty points out that while this improvement is encouraging it is still helow the corresponding figures of £345,000 and £343,000 for 1978 and 1979 respectively.

He says advertising revenue, contrary to expectations, had held up remarkably well, which emphasised the value advertisers offset by any advertising revenue and their agents found in the from Channel 4 as it would not use of television. A new rate begin transmission until November. Despite this, the company, shows the continuing confidence of the company's sales staff in being able both to increase revenue and attract new

> Dealing with programmes, Mr MacQuitty says the local productions continued as popular as ever and covered a full cycle of programmes from entertainment through information to education.

> "It has not been our good fortune," he adds, " to be able to devote the amount of time to the first category as we would have wished but, in order to lighten the heavy burden of news, we have endeavoured to inject as much of 'normal life' into our news and news magazine pro-

realistic appraisal of the per ceived public scene." The by-product had been that

many of the company's programmes had not received a showing on the ITV network. Tax for the first half is £207,000 (£164,000), leaving net profits of £190,000 compared with Stated earnings per 25p share improved from 7p to

UniChem's profits rise

Turnover of UniChem, the UK'e largest pharmaceutical wholesaler, increased by 29 per cent from £168.Im to £216.8m for 1981, while profits were up 18 per cent to £16m. The company, which is unquoted, distributed £14.2m to its

member pharmacists in respect of the year-26 per cent more than 1980.

Mr Peter Dodd, the managing director, says this year will be as competitive as 1981, but he is confident of giving member

pharmacists an even be service with more benefits.

STOCK EXCHANGE BUSINESS IN MARCH

Stock Exchange turnover soars to record £22.7bn after Budget

rates, realised in the wake of the Chancellor's Budget on March 9, encouraged heavy institutional and public buying of gift-edged securities last month and pushed terrover in the sector to record highs. Three more trading days in the month than in February contributed to the expansion.

Total business soared 37.5 per cent from February's £16.53bu to a peak of £22.73bu and the encial Times Turnover index for All Securities jumped from 506.6 to a record high of 696.4. The total number of bargains increased from February's 456,567 to 592,802.

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VILLER

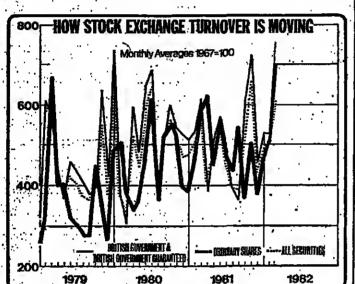
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9.199

.0.

Business in gilt-edged securi-ties expanded dramatically, jumping by a remarkable £5.33bn, or nearly 43 per cent, to a record £17.89bn and surpassing the prenous peak of £17.47bn recorded in January 1980. Business in longer-dated and irredeemables nearly doubled with a 948 percent gain from £4.94bn to £9.63hn, while trade in short-dated stocks

by 18,545 to 99,954 with the whole ncrease attributed to deals in 68.93.



cot in UK base lending rates by attaining a 1982 high point of 68.55 on March 23. Subsequently, the month a net 2.54 points up at

Financial Times Turnover index for ordinary shares rose from 506.7 in February to 608.5, its highest level since April of last car.
The Financial Times Industrial

Ordinary share index improved steadily and ended March 21.2 points up at the month's highest

increase attributed to deels in 58.93.

the longer-dated and irredeemsoles. In contract, deels in the
shorts contracted last month, by
172 to 28,998. The Financial
British Government Securities
peaked at 752.9 compared with
February's 527.2.

The increased demand for gits
followed the March 9 Budget.
The Government Securities index
The followed the March 21.2
The deals in the
shadowed by gilt-edged, were
the day of Budget
The gold by Government
The gold price fell from an endfebruary level of 5363 and
Trade in ordinary shares rose
from £2.84bn in February to
followed the March 21.2
The deals in the
shadowed by gilt-edged, were
the day of 568.5.

Gold share prices had another
measures and falling interest
weakness in the bulkion price.
The gold price fell from an endfebruary level of \$363 and
followed to the March 21.2
The budget
The Government Securities
The former and the further in the cultivation of Budget
The gold price fell from an endfebruary level of \$363 and
form £2.84bn in February
to followed the March 21.2
The followed the March 21.2
The followed the March 21.2
The followed the followed the measures and falling interest
a boost by the marked slowdown
the followed the followed the measures and falling interest
a boost by the marked slowdown
the followed the followed the f

The Laird Group PUBLIC LIMITED COMPANY

Results 1981	Year to	Year to
27 Dec	ember 1981 £'000	25 December 1980 £'000
Turnover	272,200	194,037
Profit before Tax	16,846	13,570
Tax	(3,964)	(3,750)
Profit after Tax	12,882	9,820
Extraordinary items	 7	1 22 222
Closure of Patent Shaft		(18,000)
Other items	(782)	(3,699)
	(782)	(21,699)
	12,100	(11,879)
Release of provision made in 1979	-	
for closure of Patent Shaft		18,000
	12,100	6,121
Dividends -	(2,827)	(2,102)
ransferred to Reserves	9,273	4,019
Earnings per Ordinary Stock Unit	19.0p	18.4 _f
Net dividend per Ordinary Stock Unit	4.0p	3.7
Dividend cover	4.8	5.0
Net assets per Ordinary Stock Unit	117.8p	101.1
	· . •	

Notes

A final dividend of 2p net is recommended, making a total for the year of 4p net (1980 3.7p).

3. The tax charge includes overseas tax of £2.29 million (1980 £1.85 million).

2. Compensation for the nationalisation of the shareholding in Cammell Laird Shipbuilders was finally settled at \$2.4 million, all of which has

4. The current cost profit after tax is £9.6 million and the current cost earnings per Ordinary Stock

BIDS AND DEALS Thos. Locker

acquisition

purchased e 50 per cent interest in Associated Perforators and Weavers from Butterfield Harvey

In addition, a deferred loan of £242,000 in APN has been repaid to Botterfield.

The value of the assets being acquired amounted to £737,000 on March 31 1981. The results relative to the holding being acquired produced a loss of £131,000 for the year to March 31

APN, which makes perforated materials and wire screens, has traded unprofitably in the nine months since that date but indications point towards marginal profits for the final quarter of

Spencer Gears sells lossmaker

Spencer Gears (Holdings) has Spencer Gears (Holdings) has sold its loss making subsidiary Spencer Gears Ltd. to Hi-Ton Intl. for £80,000 cash, payable by instalments. The SGL freehold factory at Sulgarve Road, Leicester, is not included.

The disposal will result in an extraordinary loss for the Spencer Gears group in 1931-82 of some £1.2m but the group will be disposing of a loss maker with liabilities to third parties other than trade creditors of over

then trade creditors of over £300,000.

£300,000.

Before interest relief grant, which is not receivable in 1981-82, the pre-tax loss of SGL for the year ended June 30 1981 was £391,000.

The loss, which has continued at a similar rate during the current year, was largely due to the recession which has affected the engineering industry particularly severely.

LONDON AND LIVERPOOL TRUST

London and Liverpool Trust has completed the acquisitions of LOS Office Supplies and T and T (Metal Products)— 243,461 ordinary shares in Londoo and Liverpool have been issued.

SECURITY CENTRES

Security Centres Holdings have ecquired, for a cash con-sideration, the business and assets of Marker Alerms of

This ecquisition significantly enlarges Security Centres' suc-cessful Scottish operation.

LINFOOD DISPOSAL

Linfood Holdings has completed the sale of John North to Manx and Overseas (Inv). Consideration satisfied wholly in

NO PROBES

The acquisition by Norsk Hydro AS of the agricultural fertiliser division of Fisons, and the proposed merger between Enoxy Inc. and International Synthetic Rubber are not being referred to the Monopolies Commission.

SHARE STAKES

Lendu Rubber Estates — Jobore State Development Cor-poration holds 237,500 ordinary (12.778 per cent).

Braid Group—B. R. P. Securities acquired a further 60,000 ordinary, taking holding to 720,000 (12 per cent).

Sturia Holdings — Family in-terests of R. A. W. Rudd increased by 26,666, bringing total to 66,666 shares.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the subdivisions shown below are based rosinly on last year's timetable.

TODAY Interims—Bryent, Glaxo, Highland Ossilleries. Glaso, rightson Ossilleries. Finals—British Priming end Communication, Erith, Luis Oordoo, Huntley and Palmer, S. Jerome, Mecfariane (Clansman). Rugby Portland Cement, George Wills.

FUTURE DATES	
Interims— A.E.	
A.Ē	May 27
Peters Ctores	April 13
Cinelo	-
Benford Concrete Machinery	April 7
Burmeh Oli	April 14
J. 8, Holdings	April 14
Lilley (F. J. C.)	April 15
Renown Inc.	
Rock Darkem	
Spear end Jeckson Intal	
Steel Brothers	April 22

IN BRIEF

CITY AND FOREIGN INVESTMENT— Results for 1961 reported Pebruary 15. Investments £3.69m (£3.05m). Net current sseets £36,306 (£7,725). Shersholders' funds £3.72m (£3.08m). Meeting, 117 Old Groad Street, £C, April 22, noon.

NORTH BRITISH CANADIAN INVEST-MENT—Final dividend for year to February 28 1982, 3.35p (3.05p) for a total of 5.1p (4.8p). Stand earnings per 25p shore 5.51p (5.45p); net asset value per share 131.61p (120.9p). Gross revenue (2003,485 (2565,121).

SPAIN			
19	99		pril 2
			Price
Hìgh	Low	_	*
350	335	Banco Bilbao	34
362	335	Banco Central	335
324	302	Bacco Exterior	335 307
337	314	Banco Hispano	318
		Dance Ind Co.	
115	110	Benco Ind. Cat	110
367	341	Banco Santander .	341
235	202	Banco Urquijo	200
395	355	Banco Vizcaya	36
245	218	Benco Zaragoza	24
120	127	Dragados	150
	60	Company The	
55 5		Espanolo Zinc	:6
63.2	58.2	Fecsa	62.
50	36	Gal. Preciados	38
68.2	61.7	Hidrole	-6
56.5	50	therduero	.58.1
104.5	87	Permiene	92.
101	94	Petroliber	
40	3	Sonetisa	.95 21
74	70.5	Talefonica:	7

This advertisement complies with the requirements of The Council of The Stock Exchange. It does not constitute an invitation to subscribe for or procure any securities.

NATOMAS

\$50,000,000

Natomas Overseas Finance N.V.

(Incorporated under the laws of the Netherlands Antilles)

15% Notes Due April 22, 1985 With Warrants to Purchase \$100,000,000

151/2% Debentures Due April 22, 1989

The Notes and Debentures will be Unconditionally Guaranteed by

Natomas Company

(Incorporated under the laws of California, U.S.A.)

The following have agreed to purchase the Notes:-

Swiss Bank Corporation International

AMRO INTERNATIONAL LIMITED

CREDIT SUISSE FIRST BOSTON LIMITED

BANQUE NATIONALE DE PARIS

HAMBROS BANK LIMITED

April 2, 1982

المكذامن المناجل

Morgan Guaranty Ltd

SALOMON BROTHERS INTERNATIONAL.

BANK OF TOKYO INTERNATIONAL LIMITED BANQUE DE PARIS ET DES PAYS-BAS Dresdner Bank Aktiengesellschaft MANUFACTURERS HANOVER LIMITED

S. G. WARBURG & Co. LTD.

The Notes issued at 100 per cent, have been admitted to the Official List by the Council of The Stock Exchange subject only to the issue of the temporary global Note. The Debentures, to be issued at 100 per cent plus accrued interest from April 22, 1982 to the date of exercise of the Warrants, have also been edmitted to the Official List by the Council of The Stock Exchange subject only to the issue of the temporary global Debenture, Interest on both Notes and Debentures is payable annually in arrears on April 22. Particulars of the Notes, Warrants and Debentures are available in the Extel Statistical Service and copies may be obtained during usual business hours up to and including April 19, 1982 from:—

Rowe & Pitman, City-Gate House, 39-45 Finsbury So London EC2A 1JA Morgan Guaranty Ltd, 30 Throgmorton Street, London EC2N 2NT

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U.S.\$100,000,000

Citicorp Overseas Finance Corporation N.V.

Guaranteed Retractable Notes Due 1992

Unconditionally Guaranteed as to Payment of Principal and Interest by

Offering Price 100% and accrued interest, if any, from April 15, 1982

The following have agreed to subscribe for the Notes:

Goldman Sachs International Corp.

Citicorp International Group

er de lez al vez en le de Commerzbank Aktiengesellschaft

Algemene Bank Nederland N.V. Banque Nationale de Paris

Crédit Commercial de France Kredietbank International Group

Morgan Stanley International Salomon Brothers International

Al-Mal Group **CIBC** Limited

Daiwa Europe Limited

County Bank Limited Hill Samuel & Co. Limited

Morgan Guaranty Ltd

Banca del Gottardo

Nomura International Limited

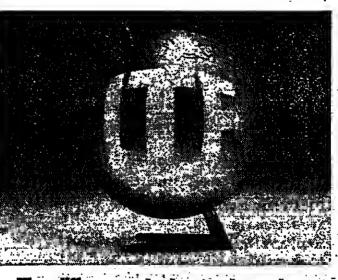
Swiss Bank Corporation International Limited The Notes, in the denomination of U.S.\$10,000 each, have been admitted to the Official List by the Council of The Stock Exchange, subject to the issue of a temporary Global Note. Interest is payable annually in arrears on April 15, commencing on April 15, 1983. The Notes are redeemable at the option of the holder on April 15, 1984, 1986, 1988 and 1990, as of which dates the interest rate may be adjusted. The interest rate for the first two-year period will be

Particulars of the Notee are available in the Extel Statistical Service and may be obtained during normal business hours

on any weekday (Saturdeys and public holidays excepted) up to and including April 19, 1982, from the broker to the issue: Cazenove & Co.,

12 Tokenhouee Yard, London EC2R 7AN

April 5, 1982



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New model from humaness.

Bank of India

announce that on and after 5th April, 1982

the following rates will apply:

(Decreased from 14%)

Deposit rate (basic) 10½%

per Annum (Decreased from 11½%)

George Wimpey secures £39.5m work

GEORGE WIMPEY AND CO has concrete coffered upper floor BLANCH DEVELOPMENT COm-won orders totalling £39.5m for slabs and beams. The stairs are PANY. The equipment to be work in the UK. both precast and insitu concrete supplied forms part of the first

borough has approved Wimpey Property Holdings as prospectiva developer for a retail scheme in the city centre on a site of 3.36 acres adjoining the market. The £20m project will involve

retention and refurbishment of the listed market building and provision of shopping facilities, including two stores, integrated at two trading levels with the

New retail space amounts to around 180,000 sq ft and as well retail units will be provided. Parking for over 500 cars is included as part of the scheme. Work is due to start in 1983 and the scheme should take around 21 years to complete.

Shell Property Company has awarded a contract valued at over £12.5m to the Aberdeen office of Wimpey Construction UK for the construction of Phase V of Shell UK Exploration and Production office development at Tullos Hill. Aberdeen.

block, a two-storey central services block and underground services ducting to link the central services block with the new and existing office blocks. Two link corridors will also be constructed between the new and existing office block. The office block comprises a aix-storey development with two maio wings and a ceotral services core totalling 19,991 square metres. The central core houses lifts and toilct facilities together with a vertical plant room which services buildings at each floor level.

plant room, water chilling plant with the produce from around room and office accommodation. 100 hectares allocated to each Work has started for completion in the spring of 1984.

An office building of basement, An office building of basement, ground floor and five upper floors is to be built for Wingate Investments in Braham Street, El by the London office of Wimpey Construction UK under a £7m contract. Office accommodation and storage space and all amenities in the building will have a gross area of 8,470 square metres. Work has started for completion at the end of July 1983.

for Lerwick "B" power station in the Shetlands. The main Engines under an earlier order from the board, are 12-cylinder

At Bolton, the metropolitan construction external facade of half of the Nigerian Federal prough has approved Wimpey the building is grc cladding Government special rise property Holdings as prospective panels with double glazed gramme, for rural communities aluminium windows,
The central services block, to make them self-sufficient in the production of parboiled rice. 1.278 square metres, comprises a The whole chain of operation for two-storey service block with processing the rice, including processing the rice, including capacity on the ground floor for barvesting, threshing, cleaning, all storage facilities and hulling, polishing, par-boiling electrical services from the main and drying has been specially switchboard standby generators and on the first floor a boiler plant has been calculated to deal

> A £2m CONTRACT to supply coal and coke handling plant to National Smokeless Fuals has gone to BABCOCK MINERALS ENGINEERING, part of Babcock International. It covers design, manufacture and installation of equipment at Monkton Coking Works, Hebburn, Tyne and Wear. Completion is due in February,

The project comprises the CROSSLEY ENGINES, Man-pany of Philips, bas won a erection of a six-storey office chester, part of NEI-APE, is to contract worth £2m for four block, a two-storey central supply a 2MW Allan Andrews supply a 2MW Allen exhaust television outside broadcast beat recovery steam turbine whicles to be used later this driven alternator set to the North of Scotland Hydro-Electric Board Games. Placed by Doordarshan, the Indian State broadcasting organisation, the order is engines for the power station, believed to be the first large also being supplied by Crossley contract for colour television production equipment to be placed in India and has been won in partnership with the Electronics Trade and Industry Development Corporation (ETTDC), a Government of India enterprise.

awarded by the Department of Industry to TECHNALOGICS COMPUTING. The contract is worth between half to threequarters of a million pounds and may even be larger as more machines may be ordered in

THE PROCESS industries division of Babcock-Bristol, a member of the Babcock Indus-trial and Electrical Products group, has won contracts worth around £220,000 for two Micro-B systems for the National Coal Systems for the National Coal Board's Hucknall Colliery in Nottinghamshire and another two for the Renishaw Park Colliery in North Derbyshire. The installation at Renishaw Park consists of two linked Micro-B systems with duplicated operator stations to provide information in the plant manager's office and the main control room. The installation at Hucknall will consist of two Micro-B systems: one for the aeparate filter press plant and one for the main washing plant.

THOMPSON FRICTION WELD-ING, Wolverbampton, bas won two contracts to supply machines to Machinoimport, the Russian foreign trade organisation, which has placed orders for a model 20 and a model 50 machine, with a total contract valua over £250,000. They will be used for the production of cutting tools, joining high-speed steels to constructional steels.

Ministry of Defence contracts worth 270,000 have been won by POWELL DUFFRYN TOOLS. Cardiff, for hand torque tools and services buildings at each floor level.

Construction is generally precast concrete columns with insitu

New men on Barclays board

GLOBE INVESTMENT TRUST has appointed to its court of directors Mr G. J. Ellerton at present chairman of Globe Management.

Mr Andrew Longhurst has taken over as managing director of the CHELTENHAM AND of the CHELTENHAM AND
GLOUCESTER BUILDING
SOCIETY: He succeeds Mr
Ralph Stow. There are two new
assistant general managers, Mr
Anbrey Spencer, who is in
charge of the network of 129
branches, and Mr Terry Adams, responsible for development.

Mr Ernest Shenton, a director of DIXONS PHOTOGRAPHIC and chief executive of its photo processing division, is to devote more time to personal interests. He will be succeeded at Photo Trade Processing by Mr Eddie Dayan, marketing director of the group's retail division. Mr Shenton intends to resign his group directorship at the end of the current financial year and will then act as a consultant to the group.

Mr A. R. (Ronnie) Taylor has mr A. K. (Ronne) Taylor has been appointed a director of LEGAL AND GENERAL GROUP. Mr Taylor was chairman of Willis Faber and a vice-president of the British Insurance Brokers Association.

Mr M. J. Babington Smith has retired as chairman of the Lon-don committee of OTTOMAN BANK and has been succeeded by Mr Desmond A. Reid.

COWARD CHANCE, solicitors, have taken Mr R. N. T. Short and Mr D. C. Stone into partnership from April 7,

GENERAL ACCIDENT FIRE

Mr David W. Lees has joined he board of R. GREEN the board of R. GREEN PROPERTIES as a non-executive

director, *

The RAVENSDOWN GROUP has appointed Mr J. P. D. Waite a director with responsibility for the RDM stainless steel and gluminium stockholding companies which operate in the north, and Mr A. W. Knisely and Mr D. Hunt as non-executive directors.

*

Mr K. K. Weir has joined the board of HOGG ROBINSON (OVERSEAS) and bas been succeeded as managing director of Hogg Robinson (Benefit Consultants).

Mr Weir will be continuing as deputy chairman of Hogg I Robinson (Benefit Consultants).

*

SPUR SYSTEMS

Mr Charles A. Evers has been appointed to the newly-created post of product director, CROWN

LIFE GROUP.

CITY OF WESTMINSTER ASSURANCE has appointed Mr Derek Rogers as agency manager and Mr Andrew Barnes as assistant agency manager.

The CREDIT INSURANCE deputy chairman of all three plant hire companies and managroup, has appointed ing director of Grayston.

Mr C. J. S. Price, chairman: Mr R. E. Granger, deputy chairman: Mr. H. C. Davies, managing director; Mr. M. March and Mr. N.

management advisory board will continue to fulfil their existing executive responsibilities (in

AND LIFE ASSURANCE
CORPORATION has appointed
Mr C. R. Barker Bennett and
Mr K. Noble, both assistant
managers (UK) as deputy
managers (UK).

The AUSTRALIAN MUTUAL
PROVIDENT SOCIETY has
appointed Mr D. O. Anderson as
the Society's chairman-designata
to succeed Sir Vincent Fairfax
who retires as a director on
the succeed sir vincent fairfax
the succe who retires as a director on July 1. He is chairman of the AMP Morgan Grenfell money

THE BRITISH ELECTRIC
TRACTION COMPANY has
appointed Mr W. Boulton chairman of the group's three plant
hire companies—Eddison Plant,
Grayston and J. D. White—in
succession to Mr G. F. Gray, who
has retired. Mr Boulton is

Mr Perry J. Bolton has joined McCORQUODALE HOLDINGS INC. as vice president to assist by Mr Desmond A. Reid.

TERRA NOVA INSURANCE

COMPANY has established a director designate of Spottisman engineers, has retired. Mr John Riddick—chairman (management advisory board with some partners, has retired. Mr John Riddick—chairman (management advisory board with some partners, has retired. Mr John Riddick—chairman (management advisory board with some partners, has retired. Mr John Riddick—chairman (management programme. Mr K. Symonds has been appointed commercial director designate of Spottisman woode Ballantyne.

**ALLIED STEEL AND WIRE ing director); Mr Ralph F. Railav

Dr David Atterton, chairman of Foseco Minsep, and Sir James Spooner, a director of John Smith Wire. Spooner, a director of John Swite and Sons, have been appointed directors of BARCLAYS BANK.

Description of Foseco Minsep, and Sir James for operations in Riyadh, Saudi — director (investment manager): manager of John Smith Wire. and Mr Ian M. Morton—director for BarFab (marine and aviation under writer). The members of the Reinforcements on the appointment of Mr Reger Evans as ment of Mr Reger Evans as operations manager. Mr Vann is replacing Mr Reg Jacobsen, The AUSTRALIAN MUTUAL PROVIDENT SOCIETY has appointed Mr D. O. Anderson as the Society's chairman-designate to succeed Sir Vinnandesignate who will be moving to Power Steeks, to succeed Mr Harry Farley, director and general manager, who retires at the emitted of June.

GEORGE H. SCHOLES has made the following changes: Mr R. W. Nash, director and general manager, is responsible for day to day running operations of the company. Mr R. M. Hntchins has been appointed to the board as commercial director. Mr D. L. Alkins, director, has become engineering director. engineering director.

CARTWRIGHT GROUP has made the following appointments: Mr Stephen Clarkson has been appointed technical services director of Cartwright Construction and Mr Jim Harker has become construction director, Mr Brian J. Hague has been represented a director of Hinkson Mr Brian J. Hague has been appointed a director of Hudson and Write. Mr Ron C. Thompson and Mr Peter Wilson have been appointed directors of A. V. Cook and Co., Leeds. Mr Robin Skardon has been appointed director of Bath-based Hayward and Wooster.

BARKER AND DOBSON | GROUP has appointed Mr M. G. | Hartley to the board.

Mr Ernest J. Warner and Mr David G. W. Turner are to join the partnership of SPENCER THORNTON AND CO, stock-brokers, on April 17 1982.

Mr Terence Clifford-Hooper has joined the board of MARY QUANT as marketing director. ing engineers, has retired. Mr

John Riddick—chairman (manag.

Malcolm White, previously an ing director); Mr Ralph F. Bailey
associate, has joined the part—director (non-marine under ments; Mr Philip Vann bas been a subsidiary of Thomas Jourdan.



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This week's business in both Houses of Parliament

cellaneous Provisions) Bill, ment (Room 16, 4.45 pm). Committee. Antiquities Bill, Third Reading. Transport (Lon-don) (Amendment) Bill, Second Reading. Debate on motion calling on the Government to revoke the British Nationality (Amendment) Regulations. De-bate on report of the Calouste Reading. Industrial Relations Gulbenkian Foundation entitled "The Arts in Schools." Committees: Home

Affairs: Sub-Committee on Race Relations and Immigration. Subject: Immigration from the Indian sub-continent. Witness: "Rt. Hon. Timothy Raison, nology. (Scotland) Bill, Third Minister of State for Home Select Committee: Foreign Debate on Poland Affairs (Room 15, 11.00 am). Affairs: Overseas Development Helsinki Declaration. Treasury and Civil Service. sub-committee—Subject: Over-Select Committees: I Subject: Budgetary Reform in the United Kingdom. Witness:

Chancellor of the Exchequer Commons: Local Government (Room 15, 430 pm).

Finance (No. 2) Bill (remaining Public Accounts: Subject: Matstages); Reserve Forces Bill ters relating to Northern Ireland. Witnesses: Northern Ireland. Lords: Local Government (Missand Department of Environ-

> Commons: Finance Bill, Second Reading. Reading. Industrial Relations (Northern Ireland) Order 1982.

Administration of Justice Bill, committee. Debate on a British component in the A320 Airbus as part of the policy of encour-aging European collaboration in growth areas of advanced tech-

5.30 pm). WEDNESDAY

Reports in session 1981-82, and relevant Government observations. At 7 pm, opposed private business concerning the British Transport Docks Board.

time Consultative Organisation (Immunities and Privileges) Order 1982. Legal Aid Bill,

Witnesses: Overseas Develop- the Arts. Witnesses: Rt. Hon. until Monday April 19.

ment Administration (Room 18, Paul Channon, Minister for the Arts; the Hon. Nicholas Ridley. Financial Secretary to the Trea-Commons: Debate on the 1st to sury (Room 6, 10.00 am).

17th Reports from the Public Defence—Subject: Ministry of Accounts Committee in session Defence Organisation and Pro-1980-S1 and the 1st to 5th curement. Witnesses: The Vis-Reports in session 1981-82, and count Trenchard MC, Minister of State for Defence Procurement; Geoffrey Pattie MP, Under-Secretary of State for Defence Procurement (Room 15, Lords: Inter-governmental Mari- 10.45 am), Transport-Subject: Transport aspects of the 1982 Public Expenditure White Paper Witnesses: Sir Peter Report, European Communities Baldwin, KCB, Permanent Sec-Report. Enfopean Communities Badwin, ACB, Fermanem Sec(Definition of Treaties) International Reilway Tariffs Agreement) Order, 1982, British
Railways Board (Amendment)
Order 1982, Deer (Amendment)
Order 1982, Deer (Amendment)
(Scotland) Bill, Third Reading, Conchiation and Arbitration
Debate on Poland and the
Belsinki Declaration

THURSDAY sub-committee—Subject: Over-Select Committees: Education, Commons: House will meet at seas Development Administra-Science and Arts. Subject: 9.30 am, take questions until tion Supply Estimates 1982-83. Public and Private Funding of 10.30 am and adjourn at 3.30 pm

All these securities having been sold, this announcement appears as a matter of record only.

NEW ISSUE

(EUROPEAN COMPANY FOR THE FINANCING OF RAILWAY ROLLING STOCK)

Kuwaiti Dinars 6,000,000 11 percent. Bonds due 1989

Kuwait Foreign Trading Contracting & Investment Co. (S.A.K.)

Blyth Eastman Paine Webber International Limited

Alahli Bank of Kuwait K.S.C. The Gulf Bank KSC The Industrial Bank of Kuwait, K.S.C. Kuwait International Investment Co. s.a.k. Kuwait Investment Company (S.A.K.) The National Bank of Kuwait S.A.K.

The Arab Company for Trading Securities (ACTS) S.A.K. . Gulf Financial Centre Kuwait Financial Centre S.A.K. Kuwait International Finance Co. S.A.K. (KIFCO

All these securities having been sold, this annou

NEW ISSUE



CHARBONNAGES de FRANCE

Kuwaiti Dinars 7,000,000 11¾ percent. Guaranteed Bonds due 1989

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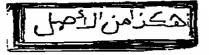
Kuwait Foreign Trading Contracting & Investment Co. (S.A.K.) - Crédit Lyonnais

Alahli Bank of Kuwait K.S.C. Kuwait Al-Mal Group Arab Trust Company K.S.C. The Industrial Bank of Kuwait, K.S.C. Kuwait International Investment Co. s.a.k. Kuwait Investment Company (S.A.K.) The National Bank of Kuwait S.A.K.

The Arab Company for Trading Securities (ACTS) S.A.K. Kuwait International Finance Co. S.A.K. (KIFCO) Kuwait Real Estate Bank (K.S.C.)







il 5 ₁₉₈₂

Gempanies and Markets	May April 7 1962	W(ORLD STO	CK MARK	ETS		
NEW YORK 1989-5 High , Low Stock 2	32% 82% Columbia Sec -32	1981-2 April High Low Stock 2	High Low Stock Ap	rii 1922 April 2 High Low Stock 2	CANADA	HOLLAND 1982 April 2 Price	HONG KONG
40% 513 ACF Industries 35 163 AMF 1634 1634 1634 1634 1634 1634 1634 1634	13	41g 23g Ct, Basins Pet. 51g 567g 521g CtNthn, Nekcosn 551g 141g 97g 21, West Financi. 113g 155g 153g Crammar. 141g 17 141g Gulf Oil. 225g 991g 251g Gulf Oil. 255g 991g 251g Hall (FB) 284g 521g 324g Hall (FB) 357g 28 25 Hammarmill Por 343g	185 15812 Metromedia 184	511s 481s 561sumbeger 433s 481s 281s 151s 560st Paper 171s 453s 451s 451s 560st Paper 171s 560st 560	High Low Stock 2 25 1914 AMCA Int I	High Low Fis	High Low H.K.
27 251s Albany Int. 25 11s 11s 12s 15t 1	3578 6114 Cons. Edison 3578 3412 8234 Cons. Foots 3414 4012 5234 Cons. Froots 3635 5042 4016 Con. Mat. Gas. 4512 1812 1212 ConsumerPower 1712 412 3 Cont. Air Lines 418 8712 2419 Contl. Greup 2245 3512 27 Cont. Ifinois 2234 17 15 Cont. Telep 1656 3534 2212 Control Data 5159	2914 25 Harris Corp 30 1914 1714 Harris Corp 30 1914 1714 Harris Corp 1814 1175 812 Hecia Mining 834 1514 25 Hecia Mining 834 1514 25 Hecia Mining 1712 2334 1918 Hercules 4 1918 8834 3234 Hercules 4 1918 4834 3048 Heublein 3719 4844 3058 Heublein 3719	15 1315 Munsingwest 13 1419 918 Murphy (GC) 10 3111 1774 Murphy (GC) 10 3414 2918 Na5isco Branda, 52 504s 43 Halco Ohem 44 17 141s Happo Industries	10 7:e iSimplicity Patt 7:4 15:4 11:4 9inger 13:4 16:4 43:9 11:4 Skyline 14:5 16:4 5:5 22:2 3mith Intil 35- 10:4 94 Sonesta Intil 10:4 17:5 12:4 Sony 14:6 17:5 12:4 Sony 14:6 17:5 12:4 Sony 14:6 17:5 12:4 Sony	12 1712 Sell Canada. 1224 1914 1014 Sow Valley. 1418 515a 2212 SP Canada. 1926 6 4.70 Brinco 4.91 1212 819 B.C. Fersst. 9 1214 23 CadillacFairNew 212 1919 1014 Camfle Mines. 1014 1114 2 Can Cement. 212	119 106 Ennie 114.5 76.7 69 EuroCom Tst 76.7 75 61.5 Gist. Brecades 70.3 67.5 47.5 Heineken 57.5 16.2 14.9 Hoogovens 17.3 2.0 6.0 Hunter Oeuglas 6.9 33 19.1 Int-Muller 25.0 113.5 86 KLM 113.3 30.4 23.3 Nagrde'n 29.5 110 104 Hat Hed Cort 109.5 37.3 32.1 Hed Cred Bahk 37.3 157 102.8 Hed Mid Sank 125.5	3.13. 3.5 New Werld Dew. 3. 6.13 4.7 C'seas Trust Bk. 4. 9.2 5.5 SKH Preps 6. 11.9 8.45 Swire Pac A. 10. 6.2 4.9 Wheel'k Mard A. 6. 3.2 5 Wheel'k Mard A. 6. 2.77 2.27 World Int. Hidgs. 2. JAPAN 1982 April 3 Pril
198 251	3512 2715 Cox Broadcast 2 3215 35 2514 Crane 2454 2454 27 Crooker Nat	527s 521s Milton Hotels 573s 515g 921s Milton Hotels 573s 515g 921s Milton Hotels 573s 29 24 Holiday Inns 271s 48 423s Holiday Inns 271s 48 423s Holiday Inns 271s 45 451s Homestake 247s 575g 521s Homestake 247s 575g 521s Homestake 25s 145s Homestake 155s 253s 253s 161s Homestake 223s 351s 253s 147s Mousehold Inti	1616 1218 Nat. 2tandard 15 9414 1836 Nat. 3teel 19 24 1536 Nat. 3teel 19 154 1538 Natomes 19 1554 1318 NONB 13 4634 3269 NCR 14 2736 244 Naw England El. 25 1676 144 NY State 2 & 0 16 3636 33 HY Times 35 4318 2956 Newmont Mining 55 1314 1215 Higg, Mehawk 13 3336 2756 HIGOR Inc. 29 4712 41 Nielzeh (AC) A 46 3918 2174 NL Industries 27	1314 1116 Southern Co	3414 1254 Can Nw Lands 23 5314 29 Can Packers 295; 29 2754 Can Trusco 273; 2654 2552 Can Imp Bank 2554; 4058 29 Can Pacific 294; 1514 1512 Can P. Ent 1512; 56 5112 Can Tire 5512; 2214 1214 Chieftain 1212; 5412 4412 Comingo 4514; 1214 1444 Cons Bathat A 1454; 215 7 Cant Sk. Canada 714; 815 6 Cosska Ragre'sa 612;	109 58.0 Oce Grinton 102.3 40.2 95.3 Dmmeren IVan. 25.7 44.6 37.6 Pakhoed 41.7 30.2 20.3 Phillips 24.6 28 21.5 Rijn Scheide 25.0 292.5 904.0 Robeso 207 125.0 112.8 Rodsmeo. 122.5 217.5 128.9 Relinco. 202.2 145.5 139.3 Rorento 147.7 67.6 71.8 Reyal Outch 27.6 26.7 71.2 Zlevenburg 2 26.7 232 176 cokyoPac Hg 214 162.1 146 Unilever 127.5	High Low Ye 949 793 Alihomoto. 90 720 520 Aniada 56 713 557 Aniald Circs 37 462 599 Eridgestene 43 1,010 obe Canon. 73 337 255 Citizen. 26 958 600 Oare. 62 405 359 DK2D. 48 166 360 Dia Nippon Ptg 64 400 353 Daiwa House 37 410 355 Daiwa Seiko. 36 409 420 Ebbra 44
381s 381s 355s Am. Neme Prod 555s 371s Am. Hose Suppy 45se 371s Am. Hose Suppy 45se 185s Am. Medical Inti 55s 37s Am. Medical Inti 55s Am. Standard 275s 365s 25ts Am. Standard 275s 365s 56ts Am. Standard 355s	2054 251 Deno 25 52 485 Dart & Krett 515e 643 97 Deta Gen 345 541g 255 Dayton-Hudson 54 36 511g Derre 323, 315 225 Delta Air. 515, 341g 273g Denny's 255, 171g 14 Dentsply Intl. 167g 191s 111s Detroit Edison 115e	207s 143s Nudson Bay Meg 143s 291s 251s Numana, 251s 251s Numana, 251s 251s Numana, 251s 251s 251s 251s 251s 251s 251s 251s	2576 9036 NLT 22 2512 4418 Merfolk & Westn' 45 2566 9014 Nth. Am. Coal	40r4 2912 /std Dil Ciliernia. 3234 4914 3454 istd Dil Indiane 40 3934 30 3d Oil Ohie 35 4 1746 1478 5tanley Wks 1556 2914 19 3tanley Wks 1556 2914 19 3tanley Drug 2019 2545 211 Sterling Drug 25 2 3454 22 3tanley Ven K 3012 2 3454 22 3tanley Ven K 3012 2 3454 2272 5torage Tech 26 4 312 3554 Sundstrand 344 4 112 3554 Sundstrand 344 5414 2356 Superior Oil 3018	9.4 5.4 Costain	55.8 27.7 Volker-Stevin	1,040 767 Eisai £05 490 Fail Rank 55 1,490 1,190 Full Film 1,30 1,500 1,140 Fullasura 1,23 5,780 4,160 Fullasura 1,23 2,200 1,710 Green Cross 1,88 650 558 Haisegawa 55 950 653 Heiwa RL East 55 724 550 Hilschl 55 575 440 Hilschl 55 664 552 Honda 66 1,050 930 Heise Feed 1,050
153	4014 3554 Diamond Intl. 3814 255a 125a Diamond Shank. 2019 97s 8 DiGlergle. 95a 1887s 724 Digital Equip. 7818 1314 105a Dillingham 115a 241a 191a Dillingham 1551a 155a 471a Disney (Walt) 551a 155a 101a Dome-Nines. 115a 444a 32 Dome-Nines. 115a 327s 2034 Dover Corp. 235a 251a 401a 201a Dow Chemical. 255a 485a 421a Dow Jenes. 48 351a 805a Downess. 48	351g 221 interlace 291 317g 241g Inter Herth 273g 641g 568g IBM 211g	231s 181s Nerten Simon 81 237g 188e Occidental Pet. 20 284 1734 Ocean Drill Exp. 21 27 234 Ogden 23 311g 281s Ogltvy & Mrth 50 15 1834 Olin 12 183s 183s Omark 14 2834 26 Oneek 27 231s 127g Dutboard Merine 23 1614 121s Overseas thip 14 2834 175s Overseas thip 14	3554 29 29ntex 5554 29 29ntex 5554 28 3512 4554 TRW 48 48 48 48 48 48 48 4	5.67 2.10 9ulistream Res 2.75 12:3 914 Hewk 2ld, Can 914 30 ¹ 4 26 Hollinger Argue 26 ¹ 4 24 ¹ ½ 17:8 Nudson Bay Ming 12 23 19 Hudson's Rev. 25 25 25 25 25 25 25 2	155 135 Creditbank 155 54 46 Elkem	654 ±60 Hoya 68 445 ±86 lob (C. 25 450 ±86 lob (C. 25 450 ±86 lob (C. 25 1,040 ±70 loc yelado. 89 540 £60 £60 £60 £60 540 £60 £60 £60 540 £60 £60 £60 540 £60 £60 £60 540 £60 £60 £60 £60 550 £60 £60 £60 £60 550 £60 £60 £60 £60 550 £60 £60 £60 £60 £60 550 £60 £60 £60 £60 £60 £60 £60 £60 £60 £6
98 231s Attantic Non 408 98 231s Attantic Non 408 91 144 Acct 15 9 941s 274s 911s Avery Mtl. 941s 471s 401s Avery Mtl. 471s 304 827s Avery Mtl. 3114 257s 223 Balt. Gas & El. 2554 258s Cal. 2554 191s 163s Bargor Purta 171s	23	197s 171e Intl. Flavours 181e 84e 41e Intl. Narvester 5 9	29 251; Dwens-Illineis 24 231s 174; PHH Group 12 277; 291; PPG Inds 32 171; 181; Pabat Srewing 17 923; 202; Pac, Gas & Elect. 21 271; 921; Pac. Lighting; 24 245; 901; Pac. Lumbor 21 20 121; Pac. Lumbor 16 251; 137; Palm Sesch; 14 314, 25; Pan. Am. Air; 13 395; 28 Pan. Hand Pipe 30 201; 13 Parker Drilling 13 22 125; Parker Henfn 18	551 391s Texas Eastern 4014 54 2317 Texas Qae Trn 404 4 2454 7014 Tesas Instricts 50 5318 2314 Texas Dil & 014 2 216 1914 Texas Dil kites 2116 4 274 2015 Textron 2516 4 2214 1514 Texas Dil kites 6014 50 4412 Themas Betts 6014 6 3714 23 Tideweter 2718 6 3312 718 Tiger Inti 718 6 37 35 Time Inc 57 6 47 3754 Times Mirror 4414	2555 1 9012 Meo Sloedel	39,900 54,000 fonca Com*le. 58,000 255, 130 Bactogi Fig. 19a 5,950 5,000 centrale. 5,450 9,500 7,800 credite Varesino 9,750 1,995 1,500 Figt. 1,554 49 29 Finerdor 41,25 5,400 2,750 Invest. 3,025 42,000 35,500 Italesment 57,100 120 120 handler 1,05 160,25 127 Rainedkon 155 3,400 2,465 Direth 2,250 5,403 2,331 Pirelli Co. 2,730 1,500 1,230 Pirelli Co. 1,453	6.50 S25 Kontatus Filt 58 6.50 S15 Kontahrelku 58 5.42 S31 Kubata 53 4.1-10 S,0cu Kyato Caramie 53 4.1-10 S,0cu Kyato Caramie 58 6.41 S04 Lien 58 6.42 S00 Macda Cons 60 6.42 S00 Macda Cons 60 6.43 S00 Macda Cons 60 6.44 S00 Macda Cons 60 6.45 S00 Macda Cons 60 6.46 S00 Macda Cons 60 6.47 S00 Macda Cons 60 6.48 S00 Macda Cons 60 6.49 S00 Macda Cons 60 6.49 S00 Macda Cons 60 6.40 S00 Macda Cons 60 6.
#414	1376 1049 Echlin Mfg 1378 2442 1818 Eckherd Jack 2018 2434 1878 Electronic Data 2214 358 234 Electronic Data 2214 357 21 Electronic Data 234 4514 4014 Emerion Elect 446s 1259 357 300 Emhart 3314 2538 1878 Engelhard Corp 2014 2476 19 Enserch 9114 5078 4412 Esmark 47 24 1836 Ethyl 1858	251s 241s Jey Mnf	578 6 Peabody Inti 5 41 21's penn Central 29 35'4 27's Penney (JC) 34 48's 33's Penney (JC) 37 874 714 Peoples Energy 8 3778 38 Pepaice 37 28 12's Perin Elmer 22 23'1 12's Petric Etmer 21 17'4 12's Petric Etmer 52 17'4 12's Petric Etmer 54 59 50'4 Pfizer 52 35's 22'4 Phelps Dodge 24 14'la 13's Phila Fleer 13	65 5214 Timken 55 8 514 954 Timbers 1256 514 23 Trenks 231 134 856 Total Pat. 636 31 2472 Trens 98 222ac 19 Trenssmerica 1914 24 9054 Transway 231a 2114 137a Trans World 2018 5114 427c Travelers 50 6 614 Tricentrol 75a	5014 5112 Nthn. Telecom 6912 1712 7 Oakwood Pet 93 2,05 130 Pacific Copper 133 5812 52 Pan seh Petrol. 64 22 144 Patino 1814 1512 112 Plecer Dev 114 15 11 Power Corp 114 3,35 1,94 Quebeo Strgn 2,50 91e 31e Reed Stenhe A 115e 4,01e 32 Rie Algom 342	540 505 5112 Vise 52. 772 20,100 15,980 Toro Assic. 17,410 16,990 15,101 de. Prel 14,576 AUSTRALIA 1922 April 2 Price High Low Aust. S 4.78 3,56 ANZ Croup 3,70 1.69 1.40 Asrow Aust 1.69 1.73 1.25 Amool Pel. 1.40	6-16
2314 1976 Seth Steel 22 19 27 1934 Sig Thee Incts 24 19 1934 Sig Thee Incts 25 1934 Sig Thee Incts 24 1934 Sig Thee	178	23 s 124 Kidde 211; 25 s 62 s Kimberley-Clark, 624 s 474 21s King's Dept St 25a 301g 274 Knight Rdf. Hws 921s 1714 1414 Koppers	2634 2018 Philip Morris 24 5035 4514 Philip Morris 48 3276 2712 Philip Pet 32 4478 3816 Pilisbury 44 2912 1214 Pinese Corp 22 2734 22 Pinese Bows 27 2514 1712 Pittstoh 18 736 358 Planning Res'eh 66 6912 65 Plasey 65 21 1712 Potaroid 12 30 2214 Potlarsh 23 2716 2312 Prentice Hall 25 8612 7812 Prooter Gambic 85	2 20% 17% Tri Continental 1918 2 15 : 97s Trien Energy 18: 8 2319 157s Trien Energy 18: 9 20 1514 UAL	261s 2214 Royal Senk	19.5 1.50 Assoc, Pulp Pap. 1.50 0.12 0.06 Audimso 0.07 1.73 1.47 Aust, Cons. Ind. 1.53 2.52 2.00 Aust, Cugarant. 1.53 2.52 2.00 Aust, Cugarant. 1.53 2.53 Aust, Nat, Inds. 7.65 2.15 1.72 Aust, Paper. 1.86 3.05 2.53 Bank HSW. 3.70 1.13 2016 Hidgs 1.15 2.70 1.13 2016 Hidgs 1.13 3.30 2.72 Boral 2.40 1.23 1.10 Biville Coppor 1.20 2.60 1.93 Brambios Inds. 2.05 4.56 2.55 2ridge Oil. 2.56	995 Eud Higpon Shinpan 83 152 151 kispon Steel 16 170 254 kispon Sucian 22 4,150 4,150 try 4,66 255 324 Sisshin Fleur 7 159 324 Sisshin Fleur 7 170 135 Nitshin Bleel 17 159 430 Konjula 44 218 263 NYK 22 1,140 7,46 Clympus 85 1,310 1,240 Orient 1,26 1,340 1,350 Pioneer 1,26
1454 1976 Brockway Gines 1354 2314 Brockway Gines 1354 2314 Brown Forman 8 3454 1965 1556 Brown Grp 2774 1965 1556 Brown Ferris 51 15 Brunswick 1776 2414 1815 Burington Ind 21 2414 1815 Burington Ind 21 2415 1914 1776 Burroughs 1914 1776 Burroughs 1914 5756 30 681 bds 5156 3475 30 681 bds 5156 5156 315	13 9% Firstone 103 3454 3012 1st Bank System 32 1134 7 1st Charter Fin. 9 -1912 17 1st Chicago 15 3552 2554 1st City Bank Tex 276 3512 2914 1st Interstate 29 1518 9-8 1st Mississippi 1014 4558 3914 1st Pend 254 558 254 Fisch 358	3714 3156 Lenox	20	11 812 Unitq 8rands	10-5 8 Trans Mntn. Oll A' 84, 6,90 3,85 lutd, Sisco Mines 5.85 221s 14-8 walker ill, Res 15-15 lutd, Sisco Mines 5.85 14-15 lutd, Sisco Mines 5.85 221s 14-5 lutd, Sisco Mines 5.85 221s lutd, Sisco Mines 5.85 lutd, Sisco Mines	10.45 7.10 BHP	802. 6bò Rehewh
5836 54 CPC in 1 3772 6844 4254 CSX 4354 1514 1016 Campbell Red L 1246 3514 2845 Campbell Tags 294 2846 2455 Campbell Tags 294 2846 2455 Canel Randoiph 22 55 2379 Cane Pacific 2376 2816 245 Carrisic Corp 913 3114 2655 Carrisic Corp 913 3114 2655 Carrisic Corp 1 3654 4514 1875 Carrisic Corp 1 4965 4514 4554 Carrer Hewley 1414 5545 4554 Catarolliar 4954	1556 1054 Fleetwood Ent. 1356 2156 1558 Flexid-van. 1558 1558 Flexid-van. 1558	2934 2314 Lowenstein	12 % 10 % Regress from 10 10 65 4814 Recyes from 10 10 11 12 14 10 Reichhold Ghem 10 11 12 12 12 12 12 12 12 12 12 12 12 12	39/8 31 VF 35/8 35/8 32 9578 Varian Assocs 31/9 12 834 Vernitron 1016 1234 1118 Virginia EP 49/4 40 Vulcan Matris 49/4 40 Vulcan Matris 49/4 47/8 58/8 Warker JH) Rea 12/9 47/8 58/8 Warker Stores 47/8 27/2 24/8 Warker Stores 27/8 45/24 61/2 (Warner Comms 88 93/8 93/8 93/8 93/8 93/8 93/8 93/8 9		6.50 2.50 Crusader Oil	4,130 3,100 TDK
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151g 137g Chicago Pnoum 141g 47g 47g	57g 41g anasco	257g 225, Maytag 261g 15 73e McCulloch 11 381g 221g McDermott (IR) 935g 661g 69 McDermott (IR) 935g 347g 2634 McDermott (IR) 935g 347g 2634 McDermott (IR) 935g 141g 365g McDermott (IR) 935g 141g 365g McDermott (IR) 935g 141g 356 McDermott (IR) 1234g 2514 1934 Media 912g 1234g 364 Media 912g 1234g 364 Media 912g 135g 365g 364 Media 912g 135g 365g 364g 365g 364g 365g 365g 364g 365g 365	1734 1448 Royal Crown	3014 1515 Wheeling Pitts 1615 2715 9512 Whitpool 9715 2778 9254 White Consoltd 26 2315 22 White Consoltd 26 264 1812 Williams Co. 2015 2334 2856 Williams Co. 2015 2334 2856 Williams Co. 51 2615 Williams Co. 51 2615 Williams Co. 51 2615 Williams Co. 2015 334 2856 Williams Co. 2015 354 354 354 355 Williams Co. 355	218 189.6 8MW 912	1,80	4.50 2.80 Abercom
537a 5014 Coca Cola	22 121s Goodyear Tirs	2234 5334 Mercantile 3ts 6234 8612 71 Merck	74g 51g Saul Invest	154 104 Valley Fet Oue 194	124.9 110 Hoschst 184.9 97 19.5 Nassch 97 97 19.5 Nassch 19.5 Nassch 184.9 97 118.8 102 Horton 118.6 180 184 Kall und Salz 172.5 195 176 Karstadt 192 155 157 130 Kaufhof 183.5 HB3.5 KHD 183.5 HB3.5	1.79 1.32 Woolworths 1.58 2.83 2.85 Wormald Intl 2.50	9.0 7.7 Huletts 8 38.5 26.5 Kloof 30 5.7 5.3 Nedbank 6 21.5 15.25 DK Eazaars 16 5.7 2.35 Pretes Hugs 2 11.05 9.50 Rembrandt 8 5.75 4.20 Remnes 4 5.35 3.00 Rust Plat 3
NEW YORK - DOW JO April April 31 31 30 2 elindustr la 838,57 853,24 822,77 824,49 822 H'me 2nds. 58,25 58,14 57,85 58,08 56	NES 1982 Since Cmpil't) ar. Mar. 1982 Since Cmpil't) 8. 25 High Low High Low 5,82 817.92 882,82 795.47 1051.78 41,82 (4/1) [8/6] (11/1/76) (20/82) 8,15 88.29 58.55 55.57 (11/1/76) (20/82)	Apr. Apr. Ma 8 1 51 AUSTRALIA All Drd. (1/1/80) 480.2 401.2 482 Metal & Minis. (1/1/86) 822-2 525.8 525	1 465,5 695,5 (4/1) 455,8 (10/5)	### AUSTRIA 1988 April 8 Prica #### Low 282 217 Credit'stait Pfd 218 204 136 LaenderbankPfd 191 263 258 Perimoseer 205 108 90 Semperit 90 178 160 Sleyr Delmier 153 210 190 Uelischer Mag 191	68.5 53.8 Klocekner	2.8 2.0 Soustead 8hd 2.31 4.4 5.54 Cold Storage 3.70 8.7 7.1 D83 6.4 5.16 Fraser & Neave 5.75 5.7 2.6 Haw Far 3.24 2.21 1.76 Inchage 8hd 1.95	3 2.4 5age Hidgs 2 5.15 4.2 5A 81ews 4 22 16 Tiger Pais 81 4 5 Unisse 3 Financial Rand US\$0.76} (Discount of, 1910) BRAZIL 1982 April 2 Po
Transport 359,54 358,04 358,68 353,15 55 Utilities	5.87 158.57 199.85 195.81 155.82 19.5 (4/1) (15/1) (28/4/89) (28/4/42) 109 42.400 — — — — — — — — — — — — — — — — — —	AUSTRIA Gredit Aktien (2/1/82) 65.54 55.55 55.5 55.5 55.5 55.5 55.5 55	92 99,57 161.58 (25/2) 98,42 (20/1 92 128.77 128.22 (25/2) 112.60 (8/5)	High Low Fis. 1,700 1010 ARBED 1,490 4,030 3,900 Bank Int A Lix 4,050 2,100 1,430 Beksert B 2,000 1,845 1,230 Ciment CSR 1,785	995 275 Schering 202.5 280 199.2 Stemene 224.7 92.1 71.5 Thysseh 92 185-197.5 Verta 175.7 134.5 185.8 Verta 124.5 288 269 Verelh-West 237 152 182 Verelh-West 145.9	SWEDEN 1988	1.95 1.32 Agestia
April April Mer. Mar. N 31 30 N Indust'is 121.90 985.56 124.28 124.83 1 Composite 115.12 118.78 111.98 112.27 1		GERMAHY FAZ-Aktien (51/12/55) 238.28 236.81 235. Commerzbank(Dec 1555) 726.56 722.2 716. HGLLANO ANP-CBS General (1875) 91.4 90.5 90. ANP-CBS Indust (1876) 75.2 71.0 72. HONG KONG Hang Seeg Bank (51/7/64 1199.27 1174.50 1155.	82 235.71 238.28 (2/4) 218.35 (18/17) 7715.1 729.50 (2/4) 566.7 (13/1) 4 80.5 91.4 (2/4) 84.0 (6/1) 5 72.6 76.2 (2/4) 85.2 (4/1)	8,050 1,800 E8E8 2,035 4,740 3,550 Electrobel 4,485 2,950 8,000 Febrique Nat 2,700 2,720 2,180 0.8, Inne 4,405 1,720 1,200 08, Isrux L) 1,576 1,950 1,490 Gevaert 1,796 3,650 2,550 Hebeken 3,550 1,360 1,304 Intercent 1,555 6,150 4,000 Kredicibank 4,600 6,920 5,500 Pan Hidsa 5,920 5,000 4,200 Petrioline 5,000	7,100 5,490 £mprunt 75,1075,6,912 2,860 2,570 CHE 55	934 906 Boliden 206 985 233 Cellulosa 237 94,3 35 Electrelux 2 88,3 229 201 Friesson 207 173 125 Esselte (Free) 126 217 125 Fegersta 142 114 91 Fortle (Free) 113 185 155 Moeeh Gam 151 141 128 9aeb-6 kania 128 241 903 Sandvik (Free) 206 6d0 456 6kandia 260 250 5kan Enskilda 200 154 126 2KF B 128	Prices Charen 1 1982 wed Banking, Insurance and Finance Each: Leura le Istrel 2,237 + 3 10C Bert holding 1,828 + 1 9ank Happahin 87, 2,017 + 6 United Mizrahi Bank 1,572 + 5 Hasank Insurance 92, 1,572 + 4
Ind. div. yield % 5.22 Ind. P/E Ratio 7.57 Long Gov. Sond yield 15,38 NY. S.E. ALL COMMON 1288 Apr. April Mar. Mar. 20 High Low	5.88	SINGAPORE	.48 7183,85 7926,55 (27/1) 8889,53 (17/5)	9 705 9 180 Sec Gen Bang 9 700	1,210	554	Sum. Mail. Sank Er. 1,040
66,28 65,49 64,62 64,65; 71,20 62,52 (12,8)	tinchanged 573 397 473 New Highs 55 88 20 New Lows 15 21 20 1982 ar. Mar. 150 High Low 1,21 281,58 632,76 (411) 270,48 (18/5) 8,55 289,05 318,09 (4/1) 258,88 (18/5)	PWEDEN	1 : 566.5 711.7 (9/1) 583.3 (29/3) 31 101.45 107.46 (9/2) 99.17 (5/1) 09: 597.82 858.52 (22/1) 588.07 (2/4)	1982 April 2 Price High Low S 129 125 Andelsbanken, 195 490 342 Sattica 6kand 387 160 127 Cepitandelsbank 127,2 370,6 331,4 0. Sukkerigb, 351 143 127 Danske Eank 127,2 146,8 97 East Asiatie 104,5 648 517 Ferenede Stygg, 607	1,650\1,020\0 umez\ \ 1,025\ 275\ 570\ Geh\ Occidantal 373.5\ 96\ 73.5\mathred{Imathred}\ 73.d\ 287\ 242.8\langle Large\ 269.5\ 915\ 719\ \cdot\ 0 \cdot\	1,510 1,203 Giba Geigy 1,225 285 910 de. Part Certs 1, 980 3,310 1,750 Cradit Sulsso 1,610 2,350 2,190 Elektrowatt 9,299 290 400 Fleher Geel 455 63,600 66,250 Hoff-RochePt Cts 60,500 6,385 6,525 Haff-RochePt Cts 60,500 5,276 5,250 Interfood 5,900 1,340 1,160 Jelmell 1,260 3,320 3,070 Hastle 950 1,463 1,060 Qer-Buehrle 1,215 256 210 Prelii 354	Oscauri Invest 347 + 8. Commercial and Inductial Ocad Sea 1,699 + 29. Pelgal "2" 2,690 + 19. Argaman Textile 21. 1,020 + 190. "Ata" Textile 25. 780 + 120. Amer. Israeli Ppr. Mills 1,330 + 200. Elule 2090 + 225.
Friday Stocks Closing on traded patca day. 18M Santa Fa Inde. 21,800 154 +1 Amer. Express 715,400 482	CTIVE STOCKS Change Stocks: Clealing on traded price day Escon	WOSLD Gapital Intl. (1/1/78) — 132.4 138. (**) Sat Mar 27: Japan Oo Bass values of a5 indices are 100 mm 500: NYSE All Comon—50: Standard an lest named based on 1875. † Excluding	7 138,5 147,2 (4/1) 128,1 17/6 w 7,210.65. TSE 534.42. ept Australia All Ordinary and Metalia d Poors—10; and Teroso—1,000; des bonds. 2 400 industrials. 2 4	451 386 Forenade Demp. 433 229 222 GNT Hidg	140	534 497 Sandoz iPi Ctzi 530 244 23d Schindler iPt Ctsi 240 747 639 Swissair 747 325 294 Swiss Bank 507 6,600 6,750 Swiss Reinste 6,000 990 850 Swiss Velkabk 986 3310 2,860 Union Bank 3,050	Fire and DII Daluk

MONEY MARKETS

BY COLIN MILLHAM

London rates ease

SHORT TERM interest rates with seven-day interbank money finishing at 125-13; per cent, com- is likely to exceed £1.5bo. pared with 131-13, per cent on

124: per cent, despite a rise in Bank of England dealing rates for some band 2 and 3 bills.

Day-to-day credit was in ebort mosi days. This was because of plan for tender today at 9 per problems estimating the amount of Exchequer transactions at the previously. end of the tax

declined in London last week, prove this week, although the with seven-day interbank money total shortage of day-to-day-credit

the previous Friday. Threetunnth funds fell to 13 ½-13 ½ per
cent from 13½-13 ½ per cent.

Discourt houses huying rates
for one-mouth eligible bille fell
to 13½- per cent from 13½ per
cent. and for three-mouth bills
to 12½-12½ per cent from 12½to 12½-12½ per cent from 12½to 12½-12½ per cent despite a rise in

In Frankfurt key lending rates were unchanged at the Bundes-bank council meeting, in line with expectations. A securities supply generally, but the repurchase agreement unwinds authorities bad difficulty forecasting the size of the deficit by a further 30-day repurchase today, but this will be balanced by a further 30-day repurchase plan for tender today at 9 per

end of the tax year.	In Paris call money fell to
BANK OF ENGLAND	TREASURY BILL TENDER

٠						
Ċ		April 2	, March 96		April 9	March 20
	Sills on offer	£100m £442.79m	£100m	Tep pocepted rate of discount		12.e143g
	Total allocated Minimum	£100m	. £100m	rate of discount	19,4717% 19,87%	19.51323 12.92%
	Allotment at	£96,89	£95.88	Amount on affar ot next tander	£100m	£100m

FT LONDON LONDON MONEY RATES

Ī	NTERBANK FIXING
60	3 months U.S. dollars
7 0 TV	bld 16 1/4 offer 15 3/2
Six	6 months U.S. dollars
On	bid 155:18 offer 137:16
	bld 16 1/4 offer 15 \$/8 6 months U.S. dollars

motic meens, rounded to the neerest one-pisteenth, of the bld and offered five reference banks at II am each Wostminuter Senk, Bank of Tekyo, Ocuteche Bank, Banqua National de Paris and Morgan Cuaranty Trust

In New York federal funds

Conditions are expected to im- per cent from 18 per cent, and ahead of payment on a state period interest rates eased loan. The low level recorded slightly as the Freoch franc im- earlier in the week reflected proved within the European intervention by the authorities to support the weaker Monetary System. In Amsterdam call money was members of the European Mone volatile, falling to 1; per cent tary System. This tended to on Tuesday, but rising to about increase the level of domestic 7 per cent the following day liquidity in Amsterdam.

WEEKLY CHANGE IN WORLD INTEREST RATES

LONDON	Apr. 9	ehango	NEW YORK	Apr. 2	change
Base rates	15 127g-131g	Unch'd	Prime rates	1012	Unch'd
7 day interbank 3 mth interbank	134.13		Federal funds 3 mth Treasury Bills	.164.151 ₂ :13.18	+0.32
Treasury Sill Tender Band 1 Bills	13.4717 <u>%</u> 134	-0.8415 Unch'd	8 Mth. Treasury 8ills		÷0.10 +0.10
Band 2 Billa Band 3 Billa	13 1254	Unch' d	FRANKEIST	9.5	Unch' d
3 Mth. Treasury Sills 1 Mth. Bank Bills 3 Mth. Bank Bills	194.123 134 124-194	Unch'd	Special Lombard Dne Mth. Interbank Three month	9.46 9.376	-0.173 -0.13
TOKYD One month Bills	7,15625	+0.5625	PARIS Intervention Rate 1 Mth. Interbank	117 118 ₇₂	Unch'd
Three month Bills	7.03126	+0.e	Three month	164	+ 13
SRUSSELS Dne month Three month	14 18 145	i i+ ₁∤ Unch'd	MILAN Dne month Three month		Unch'd Unch'd
AMSTERDAM One month Three month	85g 81g	÷ 64 + 18	DUBLIN Ons month Three month		Unch'd

London—band 1 bills mature in up to 14 days, band 2 bills 15 to 33 days, and band 2 bills 34 to 63 days. Rates quoted sepresent Bank of England buying or selling rates with the money market. Is other centres rates are generally deposit rates in the domestic money market, and their respective changes during the

Overnight —	11-13tg	13	_	_	. 13	124-124.	_	- '	_	
g days notice	. – `	131a-134 :	_	_	_		-	_ :	_	
7 days or		_	_		—	:	_	_ [_	
7 days notice	127a 131a	1314-134a I	_	– . 1	13 4-134	195e-127e	_	· = 1	. =	
One month 13:0-1315	1318-1314	134 :	1414-14	13 🐇	134	1274	13.4	134	135e	
Two months 1312 1316	1314-13-4		1414-14	1377	135			122.12#	134	
Three months, 13 %-1318	13, 13,	133a .	137a-136a	1364	134	124-194	121:121	107.10	134	
Six months 153 13 %	13 2 15	155	135-13	1319				10.7 12.4		
Nine menths 134-134	18 181		134-134	134	_	1 = 1		1916.1216	13	
Ono year 155-1314	1354-1512		155g-15 to	134	! =	- 1	-		-	
Two years	TO 12 13	134	Tank.Tank	7018	_	: - :	- :	- I	_	
140 10212		134								
Local authorsties and fi	mage benev				n drum D					
COLOR BUTHOLINES BIRG II	manca nuuset	BEACU OF	ys nouce.	ORIGIN T SEAS	III GOAR C	red. Long-E	erm iccai	Snew or .th	mottgage	

rates nominally three years 13½ per cent; four years 14½ per cent; five years 14½ per cent; per cent; per cent; per cent; four years 14½ per cent; five years 14½ per cent; per cent; per cent; per cent; per cent; four months trade bills 13½ per cent.

Approximate selling rates for one month Treeeury bills 12½,42½ per cent; two months 12½,-12½ per cent; three months 12½,-12½ per cent; two months 13½ per cent; two months

Finance Houses Base Rates (published by the Finance Xouses Association) 142 per cent from April 1 1982. Clearing Bank Deposit Rates for sums at seven days notice 10-10; per cent. Clearing Bank Rates for londing 13 per cent. Tressury Bills: Average tander rates of discount 12.4717 per cent.

Certificates of Tex Deposit (Series S) 132 per cent from March 6. Opposits withdrawn for cash 11 per cent.

EURO-CURRENCY INTEREST RATES (Market closing Rates)

April 9	Steri(ng	U.S. Dollar	Canadion Bol(ar	Butch Culider		West German Mark	French Franc	Italian Lira	Belgian Franci Convertible Ja	panese Yen
Short term 7 days' notice Month Three months Six months One Year	1356-1312	155g-167g 163g-155g 157g-155g 153g-155g 153g-155g 161g-151g	14-15 14-15 153 ₁ -181 ₈ 157 ₄ -181 ₄ 161 ₆ -161 ₉ 181 ₂ -167 ₆	84.0 84.4 84.4 84.4 84.4 84.6 84.6 84.6	514 7 33444 4443 51854 6458	91a-014 94-94 04-94 94-94 84-94 8-91a	18-93 92-27 97-99 25-26 99-93 164-204	50-80 47-57 36-40 29-3012 9578-97 9378 25	16.20 21.27 207 ₃ .253 ₄ 19.204; 18.19 17.18	014-64 642-534 643-644 018-7 678-7 078-7

3Fr (financial): short-term 11½-13 per cent; seven days' notice 12½-13½ per cent; one month 13½-14½ per cent; three months 14½-15 per cent; six months 13½-14½ per cent; one year 14½-15 per cent; six months 13½-14½ per cent; one year 13½-13½ per cent; six months 13½-13½ per cent; one year 13½-13½ per cent; six months 15½-15½ per cent; six months 15½-15½ per cent; one year 13½-13½ per cent. EU linked deposits: one month 15½-15½ per cent; three months 15½-15½ per cent; six months 15½-15½ per cent; one year 13½-15½ per cent. Congiterm Eurodolfar two years 15½-15½ per cent; three years 15½-15½ per cent; six months 15½-15½ per cent; six months 15½-15½ per cent; six months 15½-15½ per cent; six years 15½-15½ per cent; six years

CURRENCIES AND GOLD

Dollar steady

change on balance last week, touching a peak of \$1.740 on despite a rise in Eurodoliar Friday, and a low of \$1.7760 on interest rates. A rise in the U.S. Wednesday, It closed at \$1.7855money supply figures led to a \$1.7865, a fall of 45 points on firmer trend in interest rates the week, at the beginning of the week, but from then on there was little 2 fall in Euro-Swiss franc movement.

against the Deutsche Mark, and to SwFr 1.9425 from SwFr 1.9125 against the Swiss franc. On the other hand the dollar fell to FFr 6.25 from FFr 6.2525 in terms of the French franc, and was unchanged at Y247 against the Japanese yen after rising to a two year peak of Y248.

On Bank of England figures EMS currencies. the dollar's trade-weighted index Guld rose \$5 to \$327-3284. rose to 115.8 fram 115.7.

Sterling's index rose in 91.0

GOLD

dollar recorded little dollar throughout the week,

The Swiss franc suffered from interest rates. Three-month fell The U.S. currency rose to to 5% per cent from 51% per DN 2,4000 from DM 2,3945 cent and six-month to 51 per cent

from 61 per cent The French franc improved within the EMS, rising above the Italian lira and Irish punt. The Belgian franc remained the weakest member of the aystem. but stayed within its alarm bell divergence llotit. The Deutsche Mark and Dutch guilder showed

after a fairly uneventful week apart from the problems over Sterling's index trise in 91.0 apart from the problems over 10 DM 4.29 from DM 4.2850 and 10 points in London, which will 10 points in SwFr 3.47 from SwFr 3.4225. The swFr 3.47 from SwFr 3.4225 of VAT at 15 per cent. Trading 10 points in 1

THE DOLLAR SPOT AND FORWARD

April 2	Day's spread	Close	One month	% p.a.	Three	7. p.s.
UKt	1.7840-1,7940	1.7855-1.7885	0.30-0.40c dis	-2.35	0.90-1.00dis	-2.13
lielandt	1,4390-1,4440	1,4400-1,4420	E.65-0.550 pm	4.99	1.65-1.50 pm	4.37
Canada	1.2245-1,2270	1,2265-1,2270	0.06-0.09c dis	-0.73	0.25-0.28dis	-0.86
Nathlad.	2.6525-2.6700	2,8580-2,6610	1.50-1.40c pm		4,50-4,40 pm	6.70
Belgium	45.23-45.31	45.26-45,28	12-22c dis			-3.40
Denmark	6.1900-8.2150	8,1900-8,2000	1.70-2.00ore dis			-2.07
W. Ger.	2.3925-2.4040	2,3995-2,4005	1.25-1 20pf pm		3.68-3.63 pm	6.09
Partugal	71.00-74.25	71.00-71.50	50-140c dis			14.31
Spain	106,65-106,85	106.65-106.75	25-35c dia			- 3.16
Italy	1,317-1,323 .	1,317-1,318	21-25 lire dis			-13.02
Narway	8.0600-G.0645	5.0600-6.0700	1.40-1.70ore dis			-0.76
France	5,2325-e.2600	e.2475-6.2525	el-74c dis			- 9.92
Sweden	5.8980-6.9200	£.9000-£.6100	1.30-1,15ore pm		3.43-3.25 pm	2.75
Japan	246.00-247.10	245.95-247.05	1.80-1.65y pm		5.29-5.05 pm	8.30
Austra	16.81-18.86	18.81 - 15.82	9.90-8.70gro pm		26.75-23.75pm	
3witz.	1.9300-1.9440	1.9420-1.8430	1.76-1.53c pm		4.32-4.74 pm	9.84

t UK and Iroland are quoted in U.S. curroncy. Forevord pramiums and discounte apply to the U.S. dollar and not to the individual currency.

THE POUND SPOT AND FORWARD

-2.1975 2.1899 78 4.741, 11.20 80.80- 14.72 14.64- 1.2455 1.2405 51 4.281, 134.50 128.73		0.30-0.40e dip 0.30-0.60e dis 0.11-e pm 10.70e dis 10.71e dis 10.71e dis 10.71e dis 10.71e dis	-3.01 4 42 -6.90 -4.81 -7.40 3.25	0 90-1.003h 1 55-1.65dh 5 -53-pm 100-130 dls 137-154dis 1 94-2.71dh 45-41s pm	4.73 -5.69 -3.96 -5.53 4.08
78 4.744 11.20 80.80- 14.72 14.64 1.2455 1.2405 31 4.285 134.50 128.75	4.752 -80.90 -14.65 5-1 115 -4.27	0.59-0.60c dis 3-11-0 pm 30-70c dis 3-17-0 dis 7-7-0 dis	-3.01 4 42 -6.90 -4.81 -7.40 3.25	1 55-1.65dig 5 55-pm 100-130 dig 131-154dig 1 94-2.71dig 45-41-pm	4.73 -5.69 -3.96 -3.53 4.08
11.20 80.80- 14.72 14.64- 1.2455 1.2405 31 4.287- 134.50 128.75	80.90 -14.65 5-1 1115 -4.21	The dis	4 42 6.90 4.81 7.40 3.85	5 (-5)-pm 100-130 dla 13'15'qdis 1 94-2-11dig 4'4'- pm	4.73 -5.69 -3.96 -5.53 4.08
4.72 14.64- 1.2455 1.2405 31 4.287- 134.50 128.75	14.65 5-1 7-15 -4.27	The dis	6.90 4.81 7.40 3.85	100-130 dis 137-154dis 1 1 94-2-11dis 45-41- pm	-5.69 -3.96 -5.53 4.08
1.2455 1.2405 31 4.287 134.50 128.7	4.27	, ליוול, קיק שינייי קיייי	-4.81 -7.40 3.85	13'1-154dis 1 94-2.71dig 45-41's pm	-3.96 -5.53 4.08
31 4.28 ¹ / ₇ 134.50 128.75	4.2.	, ליוול, קיק שינייי קיייי	-7.40 3.85	45:-41c pm	4.08
134.50 128.75	5.1" "	., Lu.,	3.25	45:-41c pm	4.08
			-47 04		
			-17.31		- 16.27
191.75 190.50	J-127 "7	To die	-5.67	223-235 dis	-5.09
.368 2,355	-2.	" ing dis	-32.65	E7-92 dis	-15.18
10.921, 10.84-	10.63	ig:n dia	-5 25	7-Badia	-2.86
11.20 , 11.18	21.17	13-19c d:s	-15.58	32-38 drs	-12.18
0.90 10.53	1-10.541 ₂	2019 PM	0.43	113-i4 pm	0.25
441-44	12		5.39	7.35-5.55 pr	n e.43
0.25 30.03-	30.QE	13-9gro pm	· 4.39	34-27 pm	4 05
48 3.45'-	-3.471,	23-23c pm	8.64	7-61 pm	7.78
	0.90 10.53 441-44 0.25 30.03- 18 3.46'-	0.90 10.53°, 10.54°, 441-442 0.25 30.03-30.08 18 2.46°, 2.47°,	0.90 10.53 ¹ ; 10.54 ¹ ; 1.59° pm 441-442 2.50-3.20° pm 0.25 30.03-30.08 13-9gro pm 18 2.45 ¹ ; 2.47 ¹ ; 2 ³ ; 2 ³ ; 2 pm	0.90 10.53'- 10.54'- pm 0.23 \\ 441-442 \\ 2.50-2.20'\ pm 5.39 \\ 0.25 \\ 30.03-30.08 \\ 13-9pp pm 4.33 \\ 3.48'-2.47'\\ 23-2\c pm \$.64	0.90 10.53'- 10.54', '-'sery pm 0.43 1'-'s pm 441-442 2.50-20y pm 5.39 7.25-5.55 pm 0.25 30.03-30.08 13-9gro pm 4.39 34-27 pm 3.45'-24-7 pm 6.64 7-6'- pm

FORWARD RATES AGAINST STERLING Spot - 1 month 3 month 5 month 12 month

rench Franc	•••	14.165 14.3 3.47, 3.44 441,5 439	31 14.50 45 3.402	5 14 3223 5 3.3412	14.8257 3.2425 413.4
EMS EUP	OPEA	N CURI	RENCY	UNIT	RATES
	ECU contral retas	Currency amounts against ECU April 2	.% cffangs Irom Issinac Issinac	change adjusted for divergence	Divergence limit %
elgian Franc	44.6963	45,2764	+1.30	+1.30	±1.5440
anish Krone	6.19382	a.20547	+0.25	+0.26	±1.6428
iermen O-Merk	2.41815	2.39667	-0.89	-0.89	<u></u> 1.1097
rench Franc	6.19564	e.23926	+0.70	+0.70	±1.3743
utch_Guilder	2,67296	2.65596	-0.64	-0.64	±1.6069
nsh Punt	11.686793		+1.01	+ 1.01	±1.6689
	120= 12	474C #9			

Changes are for ECU, therefore positive change denotes a week currency. Adjustment calculated by Financial Tross. Sterling/ECU rate for April 2 IL558238

50 pesos Mexico 100 Cor. Austria.	599 1 ₇ -99 1 ₂ 598 1 ₃ -99 1 ₂ 676-86 5406-40 9	(£44) ₄ .46 ₁ (£55) ₄ .653 ₄) (£55) ₄ .563 ₄ 1 (£42) ₄ .48(₄ 1 (£178-179) ₂) (£178-179) ₂)	579 12-80 12 33714-8814 53714-8814 53712-8814 578-82 5408 12-406 14 6316-312 14 5448-450	(£44½ 45) (£54½ 55) (£54½ 66) (£54½ 60) (£43½-40¼) (£226½-227½) (£176¾-178¼) (£249-951¾
OTHER CL	RRENCIE	s		E Noto Ratos
Argantina Peso Austrello Dollar Brazil Cruzeiro Finland Markka Creek Oroohma Hong Kong Dollar Iran Risl Kuwait Dinar i Kill Luxembourg Fr Molaysia Doller New Zealond Dir. saudi Arab. Riya! Singapore Dollar, Sth. African Rand U.A. E. Dirham	1.6993 1.7015 685.34.254.94 6,216.8,228 118,225.115.861 10,40-10,413 147.00° 0.509-0.515 80,80-80,90 4,1270-4,1750 2.3280-9.3520 2.09.6.15 5,09.6.15 5,09.6.15 5,09.6.15	0,6510-0,6615 147,47-148,21 4,6000-4,6020 62,70-62-90 82,50* 0,2862-0,2865 45,262-0,2865 45,262-45,28 8,3320-2,3350 2,4180-3,4910 8,1280-3,1300 1,0496-1,0505	Belgium	14.68-14.7e 11.15-11.23 4.27:24.51:4 2330.3376 441.44e 4.73-4.77 10.67-10.87 199-137 184-195:4 10.55-10.65 5.445; 3.483; 1.78-1.80

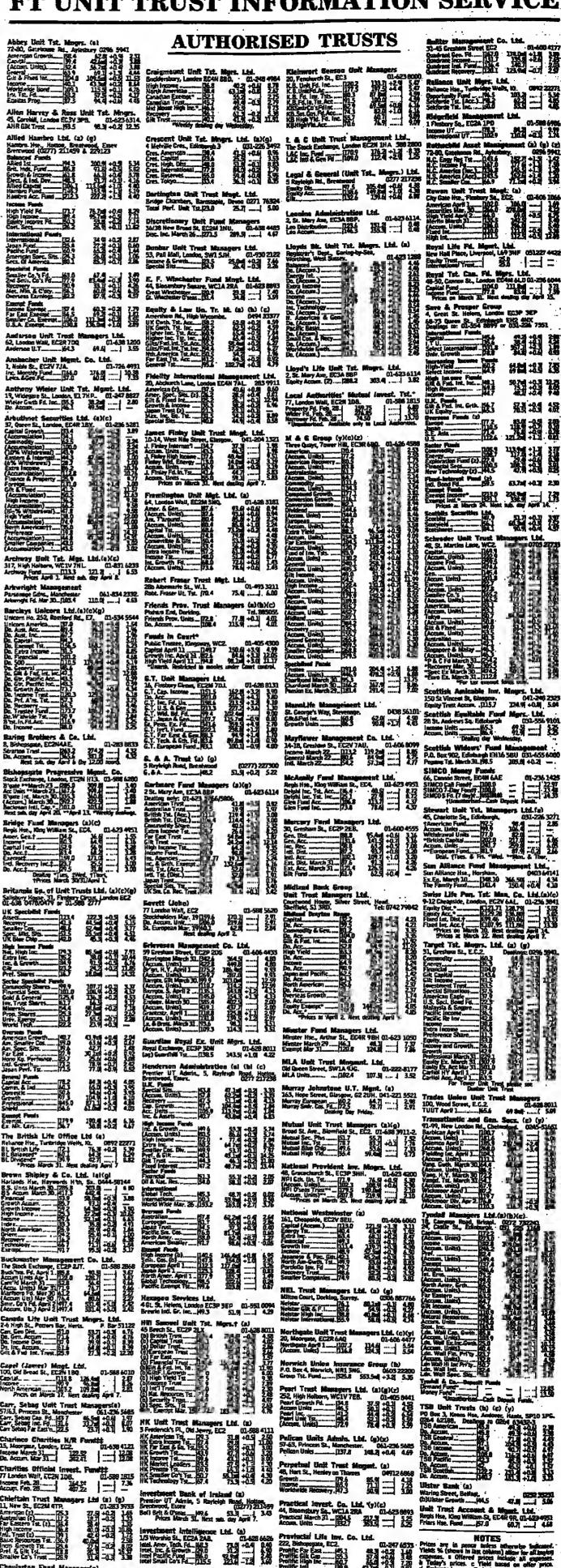
(£1851g-1835a) :83261g-32 |£1911g-1821 | 1597-528 |£183,2541 | 5335,50 |£183,101| :5397

† Now one rate. * Solking rate.

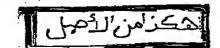
April 2		Changes	April 2			European Currency Units
Sterling. U.S. dellar. Canadion dellar. Austrian schilling. Belgian franc. Bonish kroner. Donish kroner. Busish kroner. Guiddor Francher mark. Wiss franc. Guiddor Franch franc. Ure	81.0 115.8 88.4 117.0 95.0 92.9 125.4 152.1 144.4 78.8 54.2	-32.7 +7.8 -17.9 +65.5 -2.1 -14.1 +46.8 +104.0 +21.2 -14.9 -58.3 (÷22.2	Starling	. 12 . 15.52 . 6 12 . 15 . 11 . 7 12 . 8	18.7757 50.4814 9.14242 2.67567 2.96305	0.558238 1.00036 1.32514 16.8311 45.2764 8.20547 2.39667 2.65596 6.23926 1318.48
You	ghted che eat Decen	nges from	Norwon, Kr Spanish Pts Swedish Kr. Swiss Fr. Craek Dr'ch	9 8 	6,79492 119,031 6,59828 2,15703	0.05219 106.789 5.91064 1.93420 62.9728

April 2	Pound St rling	U.S. Dollar	Deutscham'k	Japan'se Yen	FrenchFranc :	Swiss Franc	Dutch Cuild	Italian Lira	Canadia Dollar,	Belgian Fra
Pound Sterling	0.560	1.786	4.380	441.5	11,165	3,470	4.753	8358.	2.190	80,85
U.S. Dollar		1.	9.403	847.2	6,251	1,943	2.661	1320.	1.926	45,27
Dauts hemark	0.233	0.415	9.717	102,9	2,503	0.809	1,108	540,5	0.510	18,85
lopanese Yen 1,000	2,256	4.045		1000.	25,29	7.860	10.76	5340.	4.959	183.1
rench Franc 10	0.895	1,600	3,842	385,4	10.	3.108	4,257	2112.	1.861	72.01
Wiss Franc	0.288	0,610	1,236	127,2	3.818	1.,	1,370	e79.4	0,531	23.30
outch Guilder	0,210	0.378	0,903	92,90	2.345	0.730	8.016	495.1	0.461	17,01
Lalian Lire 1,000	0,424	0,758	1,820	187,3	4.735	1,479		1000,	0.929	34,29
Canadien Dollar	0,457	0.815	1,959	201.5	5.099	1.585	8,171	1077.	9,703	36,93
Seigion Franc 100	1,237	9.209	5,306	546.I	13.21	4.292	5,878	2616.		190,

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	INDUSTRIALS—Continued	Tokidensie Stackt Price at Met Cre Drie PVE Polit S	Redt Price of Red Cor Services 100 Per		AND GAS—Continued State Price I at Not Con PAE	An Integrated approach to Investment and Imance
	New Arm Arm Arm New	th. Jane Fairline Boats 10a 40 34 717 - 3.6 7 7am. July Michigan February Groups Parline 10a 34 717 - 2.5 9.1 6.4 July Feb. Herrich 2 7.2 2.7 12 4.7 June Parline 10a	# (1. 5.1) 36 23.11 13.22 1.77 6.6 11.2 Oct. April Eng. 6.1 Sept. Mar. Eng. 6.3 12.2 3.02.1 Jan. April Eng. 6.3 April En	C.Y. Trust 97 13 415 10 61 Jan. John Scrit. Inv. 63 13 18 6 41 Jan. Ang. 10v. Prefit. 28 911 256 14 1220 Jan. Ang. 10v. Prefit. 74 911 454 27 88 April Dec Pri 50p 20 247 105 10 92 May Dec Pri 50p 298 2411 16.75 10 80 Jan. 100 100 100 100 100 100 100 100 100 10	Parlers Capel 10p 174 7.12 2.75 1.71 2.3 (2.5) Parlers Capel 10p 174 7.12 2.75 1.71 2.3 (2.5) Parlers Capel 10p 174 7.12 2.8 3.2 4.3 8.9	NIKKO
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7. b	day Nor. Lead Inds. 50p. 178 1210 966 14 7 1120 Ja Star. Oct Lep Group 10p 350 2312 16.5 21 6.7 29	- HOwners Abroad . 28 - HO 35 & 18 & April Oct Regions	160 161 162 163 163 164	000 A0005 100	Che (K) Ret IIIc. 80	London, EC4 England Tel.: 248-9811 Telex: 884717
	FLOR. Priv. Health 32 De	May May Registration May May May Registration May May Registration May May Registration May	mp. 200 86 2518 3.25 1 3 5 5 22 5 1 1 2 5 1 2 5 1 1 2 5 1 1 2 5 1 1 2 5 1 1 2 5 1 1 2 5 1 1 2 5 1 2 5 1 1 2 5 1 2 5 1 1 2 5 1	me kons	10.000 1	
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	Lin. Sept. Powell Outl. Ste. 230 311 1425 2.0 3.0 (6.6) Lin. Any Press (Ma) Ep. 110 - 73 9.11 (162.76 2.0 5.4 9.2 Mar. Sept. Mar. Pressing Group: 167 152 6.88 2.8 5.9 7.8 Line. Nov. Principled Sept. 885 2.14, 12.5 1.5 4.021.8 Mar. Feb. Sept. R.F.D. Group 109 477 2.1 2.8 4.4 8.4 (1.6) Mar. Ang. Rodiant Metal . S3 23.12 3.0 1.8 8.4 (1.6) Mar. Ang. Rodiant Metal . S3 23.12 3.0 1.8 8.1110.1 4.4	May Davis Godiney 84 2311 94.0 2.5 6.8 2.5	TH AFRICANS Sept. Merchantis	roa los. 87-4 2312 22.0 0.7 3.3 — St. 5. fs. f1. 71 — St. 1.3 3.45 1.0 6.5 — 31 mm. 550-24.0 2.6 1.0 6.6 — 71	rata Gil ASO 35 24	Pelsart Res NL 18
	Nov. Apr. Rank Org	March Glanfield Lawr. 48 11.2	R0.30 138 13:036c 2.514.7 2.2 - Mai Wyod 1. In. R1. 970 111 0165c 0 9.1 0 Feb. July Monis Inv. R10c. 390 9.11 070c 2.91 9.6 3.6 May Mont. Box P. 25c 52 28.8 014c 2.118.3 5.3 - Do. Warra	Inv. 15. 52	raco 44% Cov. £901-st 29.3 041-% 19.4 19	West Coast 25c 39
	Feb. Oct. Resymbre. 96 251 50 27 7.4 7.1 Oct. Jan. Oct. Resymbre. 22 7.14 10 — 65 — 65 — 65 — 65 — 65 — 65 — 65 — 6	June Harry (Charles) 68 7.12 (2.98 - 7.1 - Movember (Rex Tractor) 60 1.12 (2.98 - Mo	A*50c; 255 522 5085c; 2.65 2.6 2.5	edentari. 78 732 H4.0 0.3 7.5 W desdate. 65 153 173 10 3.8 W	reis Aust. 27	Tins Aur.iAmai Nigeria 1p 772 8700
	Agr. Nov. Ricards 585sd 293 8.5 3.6 2417.6 May For Riley Leisure see Leisure. July Rock Darksm 10p 15 1890 22	Sept. State Rd. Comp. Xm. 1194, 144 — — — — — — — — — — — — — — — — — —	TEXTILES Jan. Sept Murray No. 18' Jan. Sept Murray No.	rths	ERSEAS TRADERS Harring Lakes - 25 발 및 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Arg. Geever 95 620 Gold & Base 123-p 12 1974
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	Feb. Sept. Figury (1) 5p	May Ass. Book P. 20p 357 12.10 47.5 2.7 3.0 (0.37) 2.7 2.0 2.0	Du. New New 7elsy New 7e	Wris. 253 — — 3dy Dec. 611 mr. 50p 99 (1)1 4.4 1.1 7.0 Aug. Dec. 115 iz 228 H2.75 — 2.9 Sec. Agr. in smallan, 118 12.10 4.8 1.1 5.8 Sec. Agr. in smallan, 118 12.10 4.8 1.1 5.8 Sec. Agr. in smallan, 118 12.10 4.8 1.1 5.8 Sec. Agr. in smallan, 118 12.10 4.8 1.1 5.8 Sec. Agr. in smallan, 118 12.10 4.8 1.1 5.8 Sec. Agr. in smallan, 118 12.10 4.8 1.1 5.8 Sec. Agr. in smallan, 12.10 5.	tay (Larmes). 92 311 64.17 20 6.5 9.2 June. 16 Duffus 140 511 56.4 11 55 045 Jan. Nitha. 510 522 11 912% 6 38 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
100	Jy.O.3.A.A. Schlumberger SI 5247, 13 080c — 18 — 0et. Feb. July Scotteros — 90 2311 5.52 1.4 8.8 0.19 0et.	May Collins William, 280ml 29.3 7.5 4 5.9 4 6.5 Feb. Sept Daveson In May Da. "A"	71 138 7.12 55.5 2.6 5.7 8.9 Dec. July Northern S 104 7.12 69.95 0.612.5 Jan. Aug. Dir & Assoc 105 105 105 105 105 105 105 105 105 105	es 242 2311 4.4 11 2.6 km, blayling line 81 2311 3.5 10 6.2 km, blayling 81 2311 2.21 12 5.0 Dec blayling blayling 83 2311 2.21 12 5.0 Dec blayling blayling 83 2311 2.21 12 5.0 Dec blayling	trib	200 28.9 2010c 1.2 Copper Aug Messina R0.50 210 11.1 Q60c 5.2 15.2
# *	Decluly Sears Heige 65 26.10 23 23 5.17.23 Jan. Aug. Sept. Securitor Go. 207 15.2 1.78 5.5 1.2 2.1 Jan. Aug. Sept. Security Services 223 15.2 3.0 3.4 1.9 22.6 April April Sept. Sept. Security Services 223 15.2 3.0 3.4 1.9 22.6 April April Services 223 15.2 3.0 3.4 2.0 21.4 April April Services 223 15.2 3.0 3.4 2.0 21.4 April Services 233 235 255 6.8 7.9 April Services 235 255 255 255 255 255 255 255 255 255	Rev. Gordon & Gotch 150 7.12 37.5 2.1 7.1 9.5 Jan. Apr. Nev. Hickory P's Oct. Haynes Pub 20p. 128 15.7 68.0 1.6 8.918.4 Oct. May Home Counties 58 3.9 5.0 \$\phi\$ 13.0 \$\phi\$ Oct. Mar. Oct. Oct. Oct. Mar. Oct. Oct.	54 712 558 211 9.5 6.9 Apr. Feb. Racharte 54 712 558 211 9.5 6.9 Apr. Feb. Racharte 54 712 510 117 71 110 Apr. Oct. Rights & Isl 00 14 1279 KL0 1.77 12 10 Apr. Oct. Rights & Isl 00 14 1279 KL0 1.77 12 12 Apr. Oct. Rights & Isl	372 23.11(+)13.5 1.8 5.2 May New Sir 1.64 25.1 6.9 1.0 6.0 Jan. July Sir 1.50 1.3 0.19 - 0.5 Jan. Jure Tox	0. A' N/V 10pl 135ml 293 433 9.6 4.6 23 e Barby MSD.5 57ml 293 4010 & 2.5 4.3 9.5 e Bros 220 9.11 8.0 2.8 5.2 7.6	Miscellaneous Anglo-Dominion 222 ay Burma Mines 10p 1612 Colby Res. Corp. 60 Feb. Cors. Wurch, 10c. 230 23,12 Q60c 1,913.9
(1) (1) (1) (1) (1)	Mar. Sept. Siction Group SQL 168st 2312 16.67 25 5.7 (2.17) Apr. Apr. Sept. Stebe Gorman 168 15.2 7.66 27 6.2 6.8 0ct. Sept. Stebe Gorman 168 15.2 7.66 27 6.2 6.8 0ct. Sept. Steber 100, 116 72.10 3.5 3.7 4.3 7.3 Nov. Jun. July Shr Therman 100 355 7.7 (2.175 3.7 7.0 4.5 Nov. July Shr Shr Shaper 100 355 7.7 (2.175 3.7 7.0 4.5 Nov. July Shr Shaper 100 355 7.8 9.9 9.9 9.1 3.0 55 8.7 7.0 4.5 Nov. July Shr Shaper 100 355 7.8 9.9 9.9 9.1 3.0 55 8.7 7.0 4.5 Nov. July Shr Shaper 100 355 7.8 9.9 9.9 9.1 3.0 55 8.7 7.0 4.5 Nov. July Shr Shaper 100 355 7.8 9.9 9.9 9.1 3.0 55 8.7 7.0 4.5 Nov. July Shr Shaper 100 355 7.8 9.9 9.9 9.1 3.0 55 8.7 9.9 9.9 9.1 3.0 55 8.7 9.9 9.9 9.1 3.0 55 8.7 9.9 9.9 9.1 3.0 55 8.7 9.9 9.9 9.1 3.0 55 8.7 9.9 9.9 9.1 3.0 55 8.7 9.9 9.9 9.1 3.0 55 8.7 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9	Apr. L'hout D. Pest Stp. 150nt 223 10.2 6 9.7 6 Jan. July Liveds Dyso Jane Hees Int. Sp. Div. 97 25.10 6.3 11 9.3 4.5 Jan. July Liveds Dyso Jane Hees Int. Sp. Div. 97 25.10 6.3 11 9.3 4.5 Jan. July Liveds Dyso Jan. July	75 87 7.12 63.5 1.8 5.7 13.7 Apr. Hoy. Do. Sch. S 32 127 0.1 0.4 0.4 0.4 0.4. 20a 73 27.11 6.25 1.5 12.2 6.8 0ct. Bo. Sid. Si 10b 524 28.3 4.0 0 11.0 0 Apr. Mar. Receive 7.6	HSD. 616 231 0446 18 16 RUE	SBERS AND SISALS	Feb. Cons. Murch. 10c. 230 23.12 Q60c 1.9 13.9 TExplained Sold. 512
- P	Jan. July Sketchiev 200 712 hlb5 25 54 10.3 Mar. Oct. May Smith&Meph. 10p 118nd 23 4.0 g2.0 52113 May June Oct. Smiths luds. 50p 363 2111 10.5 29 4.1 9.5 Nov. Oct. May Solic Law 20p. 28 476 — — Dec. Aug. Feb. Somic 18 13.7 1.0 — 7.9 —	Sept Routledge & KP 145 251 130 4.8 3.0 8.1 Man. Ampt Martin (A. Surpe (M. R.) Natur. 4.8 3.0 8.7 4.8 Mar. Ame Miller (F.) 4.9 8.0 6.27	10p. 101 111 122 35 31 13.0 — Do. Cap 49 149 10 — 29 — Dec. Just Sriegard Do. Cap 20 21 13 125 85 Oct. April St. Ardrew 49 171 2011 45 37 38 8.9 Mar. Jury Sept. Am. In	148 187 911 5.8 1.0 7.7 August Any 152 140 13 6.5 18 5.8 Feb. July Car V. 50p. 138 15.2 4.4 19 6.6 Feb. July Car 144 298 7171115 11 64 Apr. Nov. Cop.	fo-indones'n 90 147 3.33 6.6 5.5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sabina Inds, CSI. 36 - 17.6 Southwest C, 10p. 44
. ii	Sept. Feb. Sotheby P. 8. 348 2312 12.5 2.1 5.3 (89) May Nov, Saverw (C.W.) 48 25.18 12.0 1.2 1 (87) Nov. Saverw (C.W.) 92 9.11 6.0 0.8 9.3 (27) June Jan. Spring Grove 92 7.12 4.0 2.0 6.2 11.3 May Dec. Staffs, Potts 31 12.10 (0.0) 74.1	PAPER, PRINTING Internal Partition of Partit	A'	177	nd Central 10p 3 1278 0.8 7.9 Unless his sign 187. 51. 10p 1455 1.3 st.0 0.8 7.9 Unless his net sign 187. 52. 10p 147. 52.	atherwise indicated, prices and not dividends are in pence and limitions are 25p. Estimated price/carnings ratios and covers are lettest assual reports and accounts and, where possible, are of an indi-penry figures. PAEs are calculated on "nes"
	Oct. Mary Stag Furniture. 96ul 273 5.0 0 7.4 0 Apr. August Std. Fireworks. 88 247 h5.0 3.7 8.1 4.7 Oct. May Row Standard Ind. 42 10.4 ±10.9 - ± 11.7 Dec	#ALID 10n 23 5.0 1.03.9 Jan. Sept. Seices Int. July Assoc. Paper 62 5.2 4 2.6 5.5 9.7 Jan. John Sare & Barris & Mary Berrisse	100 16 153 — July Dec Scot Detari 100 12 254 220 — Ang. Mar Scot Utd. It 125mg 293 feets 5 37 37 97 Ang. Oct Sec Aligner	0 45 1211515 10 53 Apr. Oct Mai	ty, Plants, M\$1 50 185 018c 13 8.6 taxatio	also book, careings per share being computed on profit after a and unrelieved ACT where applicable; bracketed floures e 10 per cent or more difference if calculated on "mil" sion. Covers are based on "maximum" distribution; this are given dividend costs to profit after teation, excluding, anal profits/losses but inchulung exiloated extent of offsett-bie
	Nov. Apr. Steetley	July Do. Restric, Vig. 77 June Barrd	eo.). 25 27 20.8 L7 + 05.6 Dec. June Spriere inv. dim - 10.8 19 Dec. June Spriere inv. 20p. 58 152 #0.6 14.8 15 6.6 SPLIT Cap. Av. 112 13 Avr. Avr. Spriere inv.	163 2510 H6.75 10 5.99 100- 159 9.11 152 16 13.7 100- 114 - 155 H4.25 10 2.8 Appent Ass	TEAS ndia and Bangladesh and Books Ed. 1 295 1 14 60 1 171 3 5	helds are based on middle prices, are gross, adjusced to ACT of cent and allow for value of declared distribution and rights, p" Stock, he and Lows marked thus have been adjusted to allow for rights es for cash.
* / p	May Sweeth Match 190. €21 38.4 Q14% ♦ 6.2 ♦ Jaco November Swire Pac. A 60c 992 9.5 Q76c ♦ 7.6 ♦ Aug. Mar. Sept System 188 2312 19.0 15 6.8 Q12 Ap. James V. Tablez 50. 40 1178	Oci Clay (Richard). 73nd 111 10 11 13m. July Strond Riley other Clondakin Group. 53 1218 (357% 4313.8 2.6 June Her. Sarmer (F. 18 61) 61,63 3.6 5.0 6.9 May Oct Samboran Will Bec. Cropper (Junes). 142 23.22 2.5 1.0 2.5 (77.0 May Sept. Text'nd Jusy Hill Delay Pack 20p. 13 275	J 42 10.8 ±0.35 12 9.4 4.5 Feb. Sept. Technology. 10.1 12.2 13.2 13.2 9.4 4.5 Feb. Sept. Technology. 10.1 12.2 13.2 13.2 13.2 13.2 13.2 13.2 13	N 101 32 (24.10 0.4 6 1.8 November Assa 16.51 97 7.12 November Law 16.51 13 10 10 3.9 Sept McC. 15.51 111 43 1.0 4.0 Sept McC. 16.51 112 13 18 10 4.0 November 10.8	rie Plants 21. 392 12:10 20.0 19 7.3 17 Tax sod Russel 21. 345 2021 12.5 - 3.4 Final lace Pl. 1990-22 123 - 8.4 - 9.0 9 US	visu since increased or resounced, vinn since reduced, passed or deferred, free to non-residents on application, was or report awaited. it, not fitted on Sinck Exchange and company upi subjected to o degree of regulation as listed sequenties. It is notes Rule 16333.
	Mar. Ass. 175. Thread Syred 1.000 15.2 7.0 13.9 7.4 (22.9) Sept. Ian. July 176. Tener Vr. 50. 5 678 — — — July 176. Tener Vr. 50. 5 678 — — — July 176. Tener Vr. 50. 5 678 — — — July 176. Tener Vr. 50. 5 678 — — July 176. Tener Vr. 50. 5 678 — — July 176. Tener Vr. 5 678 — —	Apr. East Lancs. Ppr 55al 223 35 6 9.1 6 Jane Oct. Trafford Care. Nov. Ferry Pick 10p. 77 12.18 22.36 3.3 4.4 9.2 Jane Det. Yarstyle 20 May Ferry Pick 10p. 77 12.18 22.36 3.3 4.4 9.2 Jane Det. Yarstyle 20 May Gess forms 10p. 138 23.11 44.0 2.1 4.3137 0ct. May Yough 10p. 12p. 12p. 12p. 12p. 12p. 12p. 12p. 12	82 INTERNAL 26 #25.1 - Do.Cop. 52	136 152 6.0 1.0 7.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Sri Lanka Pric reta 153 33.0 0.9 118 Mer	a at time of suspension. Casted dividend after pending acrip and/or rights issue: cover be: No previous dividend or forecast, yer bid or reorganisation in progress. Companyable.
	June Toye 39 14 163 4.0 39 16 163 6.0 39 39 39 39 39 39 39 3	- Harrison Courtey. 73 - 3.85 2.7 7.7 6.9 cm FL.C.A. Vista, Os. 19 1.5 3.1 7.6 0.825.1 T. Feb. McCarametale. 50p 168 11.1 8.0 2.3 6.5(7.5) Jan. July BAT Inds	OBACCOS OC. Apr. Triplevest. Int. Oc. Capital Oc. Capi	250p 76 1210 71 10145 51 79 111 122 111 40 p. 729 2312 295 128 58 February Durb	Central Rand	a loterium reduced final audior reduced earnings indicated, cast dividend; cower on earnings updated by latest interium merol. or allows for comersion of shares not now randing for dividends anding only for restricted dividend, or does not allow for shares which may also rank for dividend at the date. No P/E ratio usually provided.
	lec. May United Fr. 528 53.11 26.87 \$ 6.3 \$ Sept. lec. May Univ N.V.F.12 5197 73.11 26.87 \$ 7.7 \$ Apr. ar. Sept. Unived Sax unix. 81 717 4.9 1.7 \$ 26.00 M. sept.	Dec. Milore Offser: 100 135 2618 (152) 36 32125 Jan. Sept. Returns 12 50 50 50 50 50 50 50 50 50 50 50 50 50	FINANCE, LAND June Decivity Way Aug US Dec Corp. FINANCE, LAND June Decivity Will a Teach June Decivity Will a T	7 2134 23.75.72 6 7.5 Aug Feb. Rand 1752 Street 1762 79 9.11 10.66 1.21 1.2 Aug. Feb. West	an Decp R1 616 73.12 0185c 5.9 or n Ramd Prp. R1 476 224 058c 13.3 a fu feath Est. R2 523.2 23.0 058c 13.3 a fu se. Ast K0.02 120 23.12 015c 6.9 8.0 8.0	ture date. No P/E ratio usually provided. ary value d based on assumption Treasury Still Pate stays unchanged until of stock. a Tax free. h Figures based on prospectus or other esthante. c Cents. d Dividend rate paid or payable on part of
1	lov. July Unochrome 1Dp 24g 18.5 40.65 5.9 1.9 5.9 Jan. oct. Valor 58 7.12 12.66 2.4 6.6 (7.1) Nov. per Unors 1Dp 5 774 4 7 7 7 7 6 6 6 6 7 1 7 6 6 6 6 7 1 7 7 6 6 6 6	Judy Whiter Walter 100 56 18.5 4.07 2.5 10.6 4.6 Paid Stock Judy Whiter Walter 100 56 18.5 4.07 2.5 10.6 4.6 Paid Stock Anna Waddington (1) 308 18.6 0 - # Dec. June Aberdeen Ti	Con hand and a land	700 23 12 12 02 1 1 6 4 2 May New Rose	Eastern Rand ken 90c 100mi 233 \$060c 1.2 \$\frac{1}{2}\$ \$\fr	ield, if Assumed divident and yield, is Assumed divident and ber sorip issue. J Payment from capital sources. Is Kenya, on higher than provious total. In Rights issue penking, age based on preliminary figures. S Divident and yield exclude a payment. I indicated divident: cover relates to previous
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FINANCIAL TIMES

Monday April 5 1982



Tyre rivals close to pact on standard sizes

BY STUART MARSHALL, MOTORING CORRESPONDENT

agreed proposals for a new international standard for milkmetric diameter car tyres and wheel sizes. The proposals will be put before the European Tyre and kim Technical Organisation (ETRTO) with a request that they he officially published as soon as possible.

The two companies, keen

rivals in the tyre market, have been co-operating secretly for

If the proposals win ETRTO's approval-and rejection is considered most unlikely—Dunlop and Michelin would increase

drugs use

By Sue Cameron, Chemicals

HOECHST UK-part of the

German-based chemicals con-

glomerate—has warned that the

brand-named drugs by cheaper generic ones" would eventually

destroy the UK-pbarmaceutical

The warning reflects growing fears among Britain's pharmaceutical companies that the

Government may be considering

new regulations that would

make it easier to substitute generic—unbranded—drugs for higher-priced branded ones. The

aim of such a move would be to

cut the nation's drugs bill by

Mr Brian Cromie, chalrman

of Hoecbst UK's pharmaceutical

division, is among those who have launched a strong attack

doctors would no longer know

what was being dispensed, patients would be confused, pro-

ducts would not have the legal

and moral backing of a major

manufacturer, drug recalls would be difficult or impossible and the UK pharmaceutical industry, which has made such

a major contribution to medi-

cine and to the country's

economy, would gradually be lost." he said at the weekend.

Pharmaceutical Industry, which

drug companies operating in the

"Widespread generic pre-scribing or substitution would

put some companies out of busi-

ness and diminish permanently

the prospect of discovery of new

medicines for the still un-

It claims the increased use of generics would only cut Britain's

annual drugs bill by some 3 per

cent. And it says this saving would represent only some 50 per cent of the cost of develop-

ing a single new medicine. It

also warns that the cheapest

generic drugs would probably be made abroad.

from speculation about an official

report that is now at the Depart-ment of Health. The report has

just been completed by a work-

ing party, composed mainly of officials and representatives of

the British Medical Association.

set up last year to look into the effective prescribing of drugs.
It is generally believed to call

for local pharmacists to be able

to substitute generic drugs for

hranded ones unless a doctor insists otherwise by ticking a

special box on the prescription

Drug companies fear that many doctors would not bother.

The industry's anxlety stems

conquered diseases."

The Association of the British

represents most of the major aversion to militant action.

UK, has produced a pamphlet,
The Importance of Brand
Names, warning of the effect on
the industry of generic drugs.

"NUMBER OF THE PROPERTY O

" If substitution were allowed,

as much as £80m a year,

on substitution.

replacement of

sales to the motor industry and of Michelin's high-performance DUNLOP and Michelin will gain royalty income from pro-announce soon that they have duction licenses for other tyre and wheel manufacturers.

> Dunlop and Michelin have tyres. Dunlop's Denovo "runflat" safety tyre has met with little success since it was introduced in the mid-1970s. British Leyland, the only manufacturer has fitted it to some up-market to show any enthusiasm for it; models. has dropped Denovo as factoryfitted optional equipment on all its cars through lack of demand. Denovo could only go on a special size of rim that no other

tyre would fit. While the technological merit

BY TERRY GARRETT

from BP Oil Group, the oil-refining and marketing arm of

British Petroleum in the UK and

the Irish Republic, soared from £38m in 1980 to £126m last year.

The directors blame the

Europe. They say there is little

When the parent company

announced its 1981 results in

demand '

disclosed.

of an upturn in

BY JOHN LLOYD, LABOUR EDITOR

Government's

TUC's 108 affiliated unions meet

at Wembley today to begin the campaign which they bope will

Union leaders are aware that

the outright opposition they have pledged carries a large element of risk, and have laid plans for a massive publicity

campaign to rouse their mem-

bers from their spparent

Only the 30,000-strong actors'

destroy the Employment Bill.

BY ALAN PIKE

further education.

September next year.

EMPLOYERS AND union

leaders will this week try to

reach final agreement on pro-posals for providing all 16-

a year-long programme of training, work experience and

The Government intends to

Unanimous agreement by

hoth sides of industry on a Manpower Services Commis-

sion task group, which meets again on Thursday, is essen-tial if there is to be any

chance of Mr Norman Tebbit. Employment Secretary, being persuaded to extend the scheme into a system of train-

introduce the programme for

unemployed 16-year-olds from

Fears over BP Oil's losses mount to

unbranded £126m on current cost basis

deterioration on surplus extraordinary Items. It is this capacity in the refining sector, in the UK and throughout believe realistically reflects the

mid-March, separate figures for about £7m in the closing three

the UK and the Irish Republic months while the operating loss,

refining operations were not after the cost of sales adjust-

On a historic-cost basis BP The directors say, however, Oil Group made profits of £23m, that margins are still depressed compared with £81m in 1980, and show little sign of improve-

mains determined to apply for refusal to participate in ballots state funds for its union ballots. on closed sbops; support This is in spite of a 394 to 89 through industrial action for

vote supporting an emergency unions facing legal action by

motion condemning the move at employers; withdrawal of

its annual conference yesterday. union members from industrial

This, however, is before taking ment to date, largely due to the from 1983.

cially for a similar reason. It, too, needed a special size of both faced problems with their wheel with a unique rim shape. a recent convert to the TRX tyres. Dunlop's Denovo "runIn the seven years since it was tyre on certain of its models. introduced. French car makers

> Both Dundop and Michelin have been independently developing their own high-performance tyres which stay in place on tha wheel after

blowouts and allow the driver to carry on for a few miles.

FULL CURRENT-COST losses into account the much-increased continuing competition gener-

This item alone wiped £109m

(£91m in 1980) off historic-cost

profits, producing a operating loss of £86m (a £10m loss in

1980) before tax, interest and

The final quarter of 1981

showed some improvement over

the previous three quarters.

Historic profits amounted to

TUC fight opens on Tebbit Bill

resolve to apply for state aid

It will directly flout a TUC deci-

sion, binding on all affiliates, not

to use Government cash. The actors could then face suspen-

sion, or even dismisall from the

Department of Employment will stiend the TUC conference to

report at first hand its mood

Tebbit, the Employment Secre-

The union executives are ex-

pected to endorse an eight-point

plan of opposition to the

Employment Bill, including a

Bid to agree training strategy

ing for all school leavers.

Union leaders and em-

ployers' representatives on

the task group—together with educational and voluntary

organisations — are agreed that training-for-all should be

There is also broad agree-ment that the Government's

allowances on the new Youth Training Scheme—about £15

per week—are too low.

Possible alternative allowances of £25, £27.50 and £30

bave been considered during

the task group's discussions. The group believes that at

least the lo wsstfotehee— least the lowest of these could

be met within the £1.1bn

financial ceiling which the

proposed

much-criticised

Senior civil servants from the

outcome to Mr Norman

costs of replacing oil sold.

group's performance.

ment, was under £4m.

have been Michelin'a main

customers for TRX though Ford

Dunlop has been working with Porsche in Germany and Jaguar—in this case with Michelin's co-operation—in Britain, Michelin has been working with BMW, the latter tyre on certain of its models.

Much of the pressure to develop a wheel/tyre package combining the advantages of TRX and Denovo has come from the Kerney at car industry which aims to eliminate the spare wheel to save weight and space, but without incurring extra cost or complication. At the sama time, the car makers will not accept any reduction in tyre penformance standards.

ated by the excess of crude oil availability over demand. "As

a result we are still operating

at a loss against replacement

fell by an eighth in 1981, to

15.64m tonnes. Apart from intense competition generated by overcapacity, BP Oil's direc-

against tha dollar and the non-

availability of cheaper Saudi

BP announced last year that

its Kent refinery was to close in

1982. This will create a £54m

exceptional debit in the 1981

accounts. The resulting econo-

mies, however, should improve

performance by £50m a year

arising from the legislation; and

a 10p per head levy to create a

Some disagreement on the

uses to which the £1m fund is put is likely. Some unions want

the money to be available to

heip pay unions' legal fees. But other, mainly left-led unions, argue that this would turn the

TUC into a collection agency

Mr Moss Evans, general sec

retary of the Transport and

General Workers Union, the country's largest union, told a conference of trade union dele-

gates at the weekend that "the fight is not one we can afford

to lose, nor is it one we can

dodge. The issue is quite clear

-we are fighting for survival."

News analysis, Page 6

Government has placed on the

Union leaders are insisting,

however, that in addition to set allowances they should be

entitled to negotiate topping-

up payments for young people

that the Government is dis-

regarding union arguments on the commission—marked by decisions to go ahead with

an unamended version of the Youth Training Scheme or to

privatise important parts of the Jobcentre network—TUC

leaders believe that their

If there are further signs

on the scheme.

film "war" fund.

for employers.

Physical sales of oil products

costs."

If Equity continues in its tribunals dealing with cases

Arabian crude.

Chandler . to retain Neddy position

By John Elliott, Industrial Editor MR GEOFFREY CHANDLER B

to be re-appointed director general of the National Economic Development Office for about one year.

His first four-year term, in the £30,000-£35,000 a year job, expires in June. He is thought to have agreed with Sir Geoffrey Howe, the Chancellor, that he should be re-appointed for about a year to give both him and the Government time to consider longer-term arrange-

An announcement is likely soon, possibly at the monthly meeting of the National Economic Development Council on Wednesday.

Mr Chandler, 59, joined the Nedo in 1978 after a long career in Shell, before which he had been a journalist on Financial Times.

At times he has been a controversial director - general which have criticised the Government for not trying harder to achieve consensus for its policies.

He has also called for a more positive industrial strategy and for some form of incomes policy and at times has annoyed leaders of the CBI and TUC, as well as senior ministers and civil servants, with his carefully judged ontspokenness.

But it would bave been diffi cult for the Government to refuse to renew his contact without running the risk of the sort of row which has blown up around the Manpower Services Commission, following the announcement two months ago that Sir Richard O'Brien, its chairman, was to be replaced.

In any case, Mr Chandler is thought to have run the Nedo well, providing good policy papers and other support services both for the council and for its 50 little Neddies and sec tor working parties.

He is thought not to have been keen to take on a second full four-year term. A two-year appointment would have been a suitable compromise but is regarded by all those concerned as being potentially incon-venient because it could mean hunting for a replacement around the time of the next General Election if the government stays in power for approaching its full term of

So a re-appointment period of about a year emerged as the most likely solution and was being finalised just before the

Weather

UK TODAY

WARM in many parts though cooter with rain and mist in

SE, NW, Central England, E. Anglia, E. Midlands, S.W. Scottand, N. Ireland Clondy with showers. Bright intervals. Max 16C (61F). S.W. England, W. Midlands.

Rain, perhaps heavy. Max 13C

, N.E. England Mainly dry and bright. Max. 16C (61F). Rest of Scotland

Mainly dry after rain. Sunny intervals. Max. 15C (59F). Thundery rain in South.

WORLDWIDE

annual Congress in September might take the decision on whether to withdraw from the MSC out of their hands.

Continued from Page 1

Tory revolt

weeks mean, on his view, that it is "only after killing a few of them and putting a Union Jack there" that the Tory Party will be in a mood to be mag-nanimous and start negotiations. Widespread anger after Mr

Nott warning Continued from Page 1 although most of the negotiations were currently being carried out within the United Nations. The U.S. is reported class made it clear yesterday problem. France has expressed that the U.S. opposed the use its "solidarity" with Britain, but has not specifically backed the use of force by Britain.

Nations. The U.S. is reported to have ruled out the imposition of immediate economic sanctions by Washington on Argentina, although it is prepared to review its current cautious attitude if diplomatic efforts fail and the prospect of a confrontation between two of its allies becomes more likely.

South American countries support Argentina over the windswept south Atlantic British force will be HMS islands just north of the Antarctic. The Foreign Office is carrier, which is expected to prevent Third World critismoring tide today, together with an oil tanker and supply ships. Prince Andrew, the Council condemned Argentina a helicopter pilot, will be an its allies becomes more likely. on Saturday night but called a helicopter pilot, will be an However, in Washington offi- for a diplomatic solution of the board.

payments to British banks are neutrality.

could make it considerably companies such as Unilever and more difficult for the country BAT Industries have invest-

not met and if this occurs it

quarter of its liquid inter- likely to be much criticism in Trade Department, although

Although several well-known

City concern Continued from Page 1 Euromarket centres other than this year.

London, while other bankers The UK Government did not the market. Total British thought the moves could consult with UK bankers before investment in Argentina in 1979 present difficulties for Argen-deciding to block Argentine was estimated to be worth tine especially since around a assets. As a result there is £200m at book value by the

national reserves are held in some quarters of the City which this may be a considerable London.

There is a possibility that

Argentine loans could be declared in default if interest centres was its political that long the loans are loans are loans are loans are loans are loans.

Some quarters of the City which have always felt that one of the under-estimate.

The Bank of London and South America (Bolsa), part of the Lloyds Bank Group, is navments to British have are hit of any UK companies. It is not only a major lender to the Argentine but has one of the the Commons from his own side biggest operations of any when he stressed the practical to refinance the \$3.70n of public ments in Argentina, company biggest operations of ar sector foreign debt falling due executives at the weekend foreign bank in the country,

meeting of the back-bench for-eign and defence committees where the Tory Party's tribal loyalties reasserted themselves. The view of loyalists was that the Government should be given the benefit of the doubt for the time being and that Mr Nott and Lord Carrington should be

given a chance to redeem them-

bave generally kept quiet, hop-ing that the mood will become less jingoistic with time. .. Mr Ray Whitney, the MP for High Wycombe and a former diplomat with experience of the issue, was strongly attacked in

Nott's inept speech on Saturday
was partly cooled at a private
meeting of the back-bench for-

MPs with doubts about the practability of military action fearing another fiasco like Suez

THE LEX COLUMN

When companies can buy in

The Chancellor's Budget speech made clear that some of the tax holders, for example, or bought obstacles preventing private, but out a particular shareholder. not listed, companies from doing Such tax treatment would so would be removed.

obscure clauses of the Finance Bill now appears to suggest that a route has been opened up for listed companies wanting to do the same thing, albeit at a cost. There is not going to be any revolution in corporate financial management, but at least it seems that the range of options open to companies is to be widened alightly.

The 1981 Companies makes it legal for the first time, broadly speaking, for UK companies to buy in their own shares. The relevant laws are expected to be enacted in the next few weeks. The fheoretical attraction of buying-in shares for a public company is that it allows surplus cash to be released to shareholders-

who can reinvest it in companies which actually need the capital. This kind of financial theory is not likely to cut much ice in many cash-rich company boards: they may be more im-pressed, however, by the pros-pect of reducing the discount to asset value at which their companies' share may be trad-ing a change which such a manoeuvre might achieve.

But as the legislation stands there is a heavy tax penalty involved. In a recent consultative paper the Inland Revenue spelt out the principle that whenever a continuing company distributed profits to shareholders, that distribution should be treated as an income transaction and not a capital one. In most instances, therefore, when a company buys in Its own shares, the transaction will be treated in the same way as a dividend pay-out. Advance

a tender offer direct to share-

o would be removed.

However, one of the more arrangements, by insuring that becure clauses of the Finance the cash would still be worth more in the hands of the company than in those of its share-

Different rules will apply if the company buys its own shares through the market, however. This is because under the Stock Exchange dealing system, a seller would not know whether he had sold to the company or a third party. To protect job-bers, the Government has introduced a clause (Number 47) in tha finance bill which shelters them from being taxed as if receiving a distribution.

By operating through the market the company will atill have to pay advance Corporation Tax-out this will not be too great a burden where sufficient mainstream corporation tax liability is available. Meanwhile, instead of income tax, the shareholders become hable to capital gains tax on their profits, with the normal offsets of exemptions and, in future, the benefit of indexation. Sellers presumably would tend to have appropriate tax positions.

So public companies will be indifferent in tax terms as to whether they buy in shares or pay out extra dividends. But there is still a question-mark nver how popular such capital shrinkage through own-share purchases will prove, especially as this route will tend to allow buying in of shares on only a small scale each year. Buying out hostile holders of stock may still carry a tax penalty—since a pure market transaction might be difficult to arrange. Nor will companies be able to

Public companies can start to able by the company, and the and thereby avoiding tax on think seriously now about the shareholder will be liable to interest, since the shares must circumstances in which they income tax. This would be the be cancelled and cannot be fed might buy in their own shares. treatment if the company made out when cash is needed again. Nevertheless, some compani notably those for which cash represents a high proportion of their market value-may find themselves under unaccustomed pressure from shareholders to take this course.

Laird Group

Thanks to its successful specialist divisions in transport engineering and long distance conveyor belts the Laird Group. continues to weather the recession in solid style. A rise of almost a quarter in pretax profits for 1981 to £16.8m, however, does not allow for dilution after recent equity issues, and earnings per share are only fractionally up at 19p. Still. there is current cost cover of more than three times for a yield of 4.6 per cent at 125p.

A brief boom (now fading) in UK bus deliveries put some icing on the cake of the rapid transit train business, so that pre-interest profits from transport systems rose from £7m. to almost £10m in 1981. Specialist engineering, soon to be expanded by the addition of a new conveyor factory, improved from £3.4m to about £5m. Elsewhere, however, the picture proved patchy—the American Twist Drill company bought in 1980, for instance, was hit by the U.S. recession.

. In 1982 trains and conveyor. systems should continue to show reasonable growth and there could be an upturn in the continental motor com-ponents subsidiaries. On the other hand, the bus market to weaker. Overall, profits could be up a little, and Laird ended last year with net cash. But in the slightly longer run it needs to show that its diversification policy can pay off; so far it does not look as though the U.S. acquisitions have covered as a dividend pay-out. Advance use the legislation as a tem- U.S. acquisitions have Corporation Tax will be pay- porary way of absorbing cash, their financing costs.

4



*Our search for the best possible site covered many areas throughout the UK, and Wrexham proved to be the ideal location... with its close proximity to major UK markets." John Brazier, General Corporation. General Manager, Hoya

Ophthalmic lens manufacturer, Hoya Corporation, is the first Japanese company to start-up production in Clwyd. Guided and supported by Clwyd's unbeatable industrial development agencies, this venture has got off to a fiving start.

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